



# Antarctic Connections: Christchurch & Canterbury



*Morning, Discovery and Terra Nova at the Port of Lyttelton following the British Antarctic (Discovery) Expedition, 1904.*  
(<http://www.nzhistory.net.nz/media/photo/captain-scotts-ships-lyttelton>)

A guide to the past and present connections of Antarctica to Christchurch and the greater Canterbury region.

Compiled by James Stone, 2015.

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# Christchurch – Gateway to the Antarctic



Christchurch has a long history of involvement with the Antarctic, from the early days of Southern Ocean exploration, as a vital port during the heroic era expeditions of discovery and the scientific age of the International Geophysical Year, through to today as a hub of Antarctic research and logistics.

There are five key ‘Gateway’ cities in the Southern Hemisphere for travel south to the white continent, of which Christchurch is one.

The stopping off point, port, and home to some of the most influential figures in Southern Ocean and Antarctic history, including Cook, Scott, Shackleton and Hillary, Christchurch, Lyttelton and the surrounding region of Canterbury are full of links to Antarctica. These links continue to this day, with Christchurch hosting the Antarctic programs of not only New Zealand, but also the USA, Italy and South Korea.

Beyond the historical, exploratory and scientific connections, Antarctica permeates the city’s people, cultural, artistic and economic heart. Come and explore Canterbury’s ties to the great white South...

## **How to use this guide:**

Antarctic Connections: Christchurch & Canterbury explores and explains the history of relationships between the region and Antarctica; first introducing the historic navigators, heroic explorers and scientific investigators, then moving on to explore the links that remain to present day Christchurch, Lyttelton and Akaroa, with key locations described in detail and suggested itineraries and maps provided to allow your own journey of discovery, ranging from short city walks, to day long adventures and attractions for all the family, whatever the weather.

The guide can be enjoyed as a narrative, or used to jump to the section/region/explorer of interest, head to the [contents page](#) and let your Antarctic adventure begin...

**[An interactive map of all locations featured in this guide can be accessed here.](#)**



# Significant Events in Canterbury's Antarctic History<sup>(1)</sup>

Year	Date	Event
1901	29 November	<i>Discovery</i> arrives Lyttelton Magnetic Observatory opens Scott dinner at Provincial Chambers
	10 December	Dinner given by Philosophical Society of Canterbury at Warner's Hotel Wilson does taxidermy at Canterbury Museum
	21 December	Middleton Grange used by members of <i>Discovery</i> Expedition Service held by Bishop Julius of Christchurch on <i>Discovery</i> <i>Discovery</i> departs Lyttelton
1902	16 November	<i>Morning</i> arrives Lyttelton
	6 December	<i>Morning</i> departs Relief Voyage 1
	30 December	Furthest South reached by Scott, beyond 82°South
1903	25 March	<i>Morning</i> returns Lyttelton with Shackleton
	24 October	<i>Morning</i> departs Relief Voyage 2
1904	1 April	<i>Discovery</i> , <i>Morning</i> and <i>Terra Nova</i> arrive Lyttelton
	7 April	Banquet given
	9 April	Dinner at Canterbury Club
	24 April	<i>Terra Nova</i> departs
	3 June	Farewell dinner at Coker's Hotel
	5 June	Edward and Oriana Wilson attend service at St Mary's, Merivale
	8 June	<i>Discovery</i> and <i>Morning</i> depart
	August	First Antarctic display opens Canterbury Museum
1907	11 September	Steam Tug <i>Canterbury</i> [Lyttelton] delivered
	23 November	<i>Nimrod</i> arrives Lyttelton Magnetic instruments calibrated at Observatory
	30 December	Dinner for <i>Nimrod</i> crew at Canterbury Club
1908	1 January	<i>Nimrod</i> departs Voyage 1, accompanied by <i>Koonya</i>
	8 March	<i>Nimrod</i> returns Lyttelton
	10 March	Mt Erebus climbed for first time
	1 December	<i>Nimrod</i> departs Voyage 2
1909	9 January	Shackleton reaches furthest South, 97 miles from the Pole
	16 January	South Magnetic Pole reached for first time
	25 March	<i>Nimrod</i> returns Lyttelton
	28 March	Thanksgiving service in Christchurch Cathedral for Shackleton and crew of <i>Nimrod</i>
	7 April	Shackleton gives public lecture at His Majesty's Theatre
1910	28 October	<i>Terra Nova</i> arrives Lyttelton
	25 November	Dogs and ponies moved from Quail Island
	26 November	Farewell address by Bishop of Christchurch <i>Terra Nova</i> departs Voyage 1
1911	1 April	<i>Terra Nova</i> returns Lyttelton
	14 December	Amundsen reaches South Pole
	15 December	<i>Terra Nova</i> departs Voyage 2
1912	17 January	Scott reaches South Pole
	3 April	<i>Terra Nova</i> returns Lyttelton (off Akaroa 1 April)
	26 April	Amundsen gives public lecture
	11 July	<i>Aurora</i> in Lyttelton during Australasian Antarctic Expedition (AAE)
	6 August	<i>Aurora</i> departs Lyttelton
	14 December	<i>Terra Nova</i> departs Voyage 3
1913	12 February	<i>Terra Nova</i> returns Voyage 3 Memorial service held in Christchurch Cathedral for Scott, Wilson, Bowers, Oates and Evans
1917	9 February	Scott Statue unveiled by Governor General Viscount Jellicoe
	24 February	Shackleton unveils oak tree at the Girls Training Hostel, Ensors Rd
	26 February	Civic reception for Shackleton at Council Chambers followed by lecture at Colosseum Civic reception held for Captain Davis of <i>Aurora</i>

(1. Reproduced and modified from Fiona Wills, (2008) and based on a list compiled by South Latitude Research Ltd with the assistance of Baden Norris May 2002 ([http://www.anta.canterbury.ac.nz/documents/GCAS\\_10/Projects/Fiona\\_Wills.pdf](http://www.anta.canterbury.ac.nz/documents/GCAS_10/Projects/Fiona_Wills.pdf)))

# The Early Navigators

## Captain James Cook (1728-1779)

British explorer James Cook, aboard *HMS Endeavour*, first sighted New Zealand on 7 October 1769 during his voyage to attempt to discover the fabled *Terra Australis Incognita* (Antarctica). He completed a circumnavigation of New Zealand in 1770. Cook's second voyage in 1774 was aboard *Resolution*; this time he reached 71°10'S, further south than any ship had ever sailed before.

A marble [statue of Captain Cook](#) stands in Victoria Square ([Location C](#)). Sculpted by William Tretheway and unveiled in 1932, it commemorates Cook's three voyages around New Zealand. The inscription below the statue reads:

JAMES COOK  
CAPTAIN ROYAL NAVY  
CIRCUMNAVIGATOR  
WHO FIRST HOISTED THE  
BRITISH FLAG IN NEW ZEALAND  
AND EXPLORED HER SEAS  
AND COASTS  
1769-70 1773-4 1777  
  
OCEANI INVESTIGATUR  
ACCURIAMUS



## Sir Joseph Banks (1743-1820)

Joseph Banks was botanist on board the *Endeavour* with Cook and lends his name to the **Banks Peninsula** ([Location k](#)). Initially labelled as Banks's Island, one of few mistakes Cook made on his remarkably accurate map of New Zealand. Cook's mistake was corrected in 1809 by Captain S. Chase of the *Pegasus* who tried to sail between the 'island' and the mainland<sup>(2)</sup>.

## Sealers & Whalers

The waters and islands of the Southern Ocean provided a bountiful resource for exploitation of seals and whales during the early nineteenth century.

Benjamin Morrell, an American sealer and explorer was the first Antarctic to visit [Lyttelton](#) on return from the Auckland Islands in 1830 concluding:

*'I think that Auckland's Island is one of the finest places for a small settlement that can be found on any island in the southern hemisphere above the latitude of thirty-five. Every valuable animal would thrive here ... Grain, fruit; vegetables of all kinds (excepting tropical fruits) could be made to flourish here with very little labour. No island on the globe, of equal dimensions, can boast so many excellent harbours ... The whole island ... would form a delightful retreat to a few amiable families who wish for "a dear little isle of their own".'*

# Explorers of the Heroic Age

Successful relationships were forged during the heroic era of Antarctic exploration, firstly through Commander Scott's *Discovery* expedition, and through the later heroic era expeditions of Shackleton and Mawson.

These laid the foundations for a longstanding relationship between Canterbury and Antarctica, and as a direct result of those early relationships Canterbury has one of the best public collections of heroic era artefacts in the world.

As Sir Edmund Hillary noted "*much of the history of Antarctic exploration has flowed through Christchurch*" and a century on Canterbury continues as one of the central gateways to Antarctica.

## Captain Robert Falcon Scott (1868-1912)

Commander (later Captain) Robert Falcon Scott led two expeditions to the Antarctic during the so called heroic era of exploration.

1. The National Antarctic [*Discovery*] Expedition (1901-1904)
2. *Terra Nova* Expedition (1910-1914)

He chose [Lyttelton](#) as the port of departure for both expeditions: Dinners and church services were held to honour Scott and his men, and many provisions for the *Discovery* expedition were provided by the people of Canterbury including 45 sheep, coal, fresh vegetables and clothing. Large numbers of people reportedly visited the ship on the weekends; so many that extra trains had to be put on, and tens of thousands of people gathered to see *Discovery* off on 21 December 1901.



Scott recorded in his diary:

*"It is most difficult to speak in fitting terms of the kindness shown to us in New Zealand...On every side we were accorded the most generous terms by the firms or individuals with whom we had to deal with in business matters"*

In 1904 Scott returned to Lyttelton having successfully undertaken scientific research and reaching the furthest south at the time (82°16"S). Again dinners and church services were held and in 1904 the first Antarctic display was opened at the [Canterbury Museum](#) ([Location A](#)) with valuable contributions from both Scott and [Wilson](#).

In September 1909, days after the birth of his son Peter, the now Captain Scott opened a London office to raise funds for his next Antarctic foray, the *Terra Nova* Expedition, launching his second attempt for the South Pole from [Lyttelton](#) in 1910.

Scott, his wife Kathleen and his officers (including [Wilson](#)) were entertained by and stayed with [Joseph Kinsey](#), Scott's local agent, at his residence, Te Hau, 14 Kinsey Terrace on Clifton Hill. Following a farewell address by the Bishop of Christchurch the *Terra Nova* departed south on the 26th November, 1910.

Scott had studied [Shackleton](#)'s account from his 1907-1909 Pole attempt, and would follow the same route up the Beardmore Glacier and on to the Polar Plateau. He relied on a combination of methods for travel, including man-hauling, two dog teams and 10 ponies, which would be killed along the journey to provide fresh meat.

Scott pioneered a new transport method, motorised sledges, but despite high hopes they broke down soon after leaving. Once the ponies were killed and the dog teams sent back, it was just the men and their sledges<sup>(3)</sup>.

*Terra Nova* returned to Lyttelton twice during the expedition. Once to reprovision, arriving on 1 April 1912 with the news that Scott had *not* reached the Pole before [Amundsen](#). On 3 January 1912, when the last support party turned back north, Scott and his party were within 240 km of the Pole. Amundsen had already made the Pole on 14 December 1911. Despite disappointment, around 40 people turned out to farewell *Terra Nova* when she left Lyttelton at 5 a.m. on 14 December 1912. The expectation was that she would return in March or April 1913 with Scott's party<sup>(4)</sup>.

During this time in Lyttelton, Captain Pennell noted '*Gran, Mears and the Russian groom Omelchenko stayed with the Dennistoun family on a farm at Peel Forest, South Canterbury*'. As a result of that friendship, Pennell invited 28 year old James (Jim) Robert Dennistoun on the second voyage south<sup>(5)</sup>.



***Terra Nova* expedition sledge used on the journey to the South Pole.**  
© Canterbury Museum.



**This ice axe is said to have belonged to Scott.**  
© Canterbury Museum.

(3). Reproduced from Scott's Last Expedition (<http://www.scottslastexpedition.org/expedition/journey-to-the-south-pole/>)

4. Reproduced from New Zealand History, Antarctica and New Zealand: Triumph and Tragedy (<http://www.nzhistory.net.nz/politics/antarctica-and-nz/events>)

5. D. L. Harrowfield (1991) 'Call of the Ice: Fifty years of New Zealand in Antarctica' pp.57)

Scott and the Polar Party – Bowers, Evans, Oates and [Wilson](#) – reached the South Pole on 17 January 1912.

*"The Norwegians have forestalled us and are first at the Pole. It is a terrible disappointment."*

**[From Robert Falcon Scott's diary, January 1912]**

Evans died on the return journey, one month after reaching the Pole. Four weeks later Oates walked into a blizzard never to return. He suffered from painful frostbite and could not go on. He sacrificed himself to give his comrades a chance to survive. Scott wrote,

*"He said, 'I am just going outside and may be some time'... we have not seen him since".*

Scott, Bowers and Wilson were running out of food and fuel and were in desperate need of supplies, but unusually cold temperatures and violent blizzards trapped them in their tent.

They never made it and died sometime in March from cold, exhaustion and starvation, about 10 weeks after reaching the Pole. They were only 20 kilometres from the large One Ton depot, where they would find provisions and fuel.

Scott kept writing his diary until the very end. His last entry was on 29 March 1912, in which he pleaded *"for God's sake look after our people"*.

*"Had we lived, I should have had a tale to tell of the hardihood, endurance, and courage of my companions which would have stirred the heart of every Englishman.*

*These rough notes and our dead bodies must tell the tale ..."*

**[From Scott's 'message to the public', written as he lay dying in his tent]<sup>(6)</sup>.**

*Terra Nova* returned to Christchurch for a third time in 1913 bearing news of the death of Captain Scott four of his companions on their way back from the South Pole, arriving in Lyttelton on 12 February 1913, she was greeted with a town in mourning.

(6. Reproduced from Scott's Last Expedition (<http://www.scottslastexpedition.org/expedition/journey-to-the-south-pole/>))



A memorial service was held at [Christchurch Cathedral \(Location D\)](#) on 12 February 1913, and a statue carved by Scott's widow Kathleen was commissioned by Christchurch City Council and erected in **Scott Reserve (Location E)** on the corner of Worcester Boulevard and Oxford Terrace in 1917 to thank the people of Christchurch for their support.

The statue bears Scott's last message:

*'I do not regret this journey, which shows that Englishmen can endure hardships, help one another, and meet death with as great fortitude as ever in the past'.*

Unfortunately the statue fell from its plinth during the 2011 Canterbury earthquake, and although cushioned by the grass, sustained breaks to the ankles. Repairs are underway.



[Canterbury Museum \(Location A\)](#) holds many artefacts from both Scott's *Discovery* and *Terra Nova* expeditions, including sledges, clothing, ice axes, cutlery, and food items and a bust of Scott also carved by his wife.

Work is currently being carried out by Christchurch based [Antarctic Heritage Trust](#) to restore and conserve the Scott's heroic era Ross Sea huts – Discovery Hut at Hut Point and Terra Nova Hut at Cape Evans.

To view the movie '*Scott of the Antarctic*' click [here](#).

# Dr Edward ('Uncle Bill') Wilson (1872-1912)

Doctor, zoologist and artist, Captain Scott's best friend and adviser. One of the most cultivated and intelligent members of Scott's expeditions, Edward Wilson nicknamed 'Billy', was born in Cheltenham, England in 1872. Wilson was a great artist, and fascinated with nature. Studying first, natural sciences at Cambridge, followed by medicine.

Wilson joined the *Discovery* expedition as a volunteer, sledging with [Scott](#) and [Shackleton](#) to beyond 82° South, further south than anyone had reached before. Shackleton later wanted Bill to join his *Nimrod* expedition, but, partly out of loyalty to Scott, Wilson refused.

On the *Terra Nova* Expedition, Wilson died on the return journey from the South Pole in the tent with Scott.

In Antarctica, Billy is commemorated with, Cape Wilson 82° 14'S, 37° 10'W; Wilson Hills 69° 40'S, 158° 30'E and the Wilson Piedmont Glacier 77° 15'S, 163° 10'E<sup>(7)</sup>.



Edward Wilson sketching at the Cape Evans hut  
© H Ponting photograph, Canterbury Museum.



Edward Wilson's miniature silk flag

Edward Wilson flew this small silk New Zealand flag at the South Pole on 18 January 1912.

Canterbury resident Miss Anne Hardy of Rakaia gave it to him and that he take it with him to the Pole. © Canterbury Museum,

## Uncle Bill's Cabin

Godley Head [Awaroa] Reserve/Taylor's Mistake Walkway  
([Location W](#)) Access from Sumner via Evans Pass Road.

This small yet significant little cabin was taken to the Antarctic on the *Terra Nova* for use by Captain Scott as a meteorological hut in 1911. However, it was returned unused in 1912, unloaded and dragged up from [Lyttelton](#) Harbour to be erected on the Port Hills above Sumner in the garden of Sir [Joseph Kinsey](#), the expedition agent, where it housed Scott's dog handler, **Dimitri Gerof**, for two years.

The woman who oversaw the reassembly of the hut was Oriana Wilson, Bill's [Dr Edward Wilson's] wife. The cabin was intended for her and her husband on his return from the South Pole. However, he never returned.

Oriana used the cabin as her base while she waited in New Zealand from February 1912. In February 1913, she learned from the headlines of the Evening Post in Christchurch that her husband had died, that she had, in fact, been a widow for a year.

(7. Reproduced from New Zealand Antarctic Heritage Trust (<http://www.nzah.org/AHT/MeettheCrewEvans/>))

# Uncle Bill's Cabin

Oriana's cabin is a Historic Place. Designed by Boulton and Paul Ltd, of Norwich. It is of solid tongue-and-groove construction, with lead roof decking, a teak veranda and flooring so hard that it breaks nails. It was a light, easy-to-erect pioneering structure. This hut remained on Kinsey's Sumner property under the care of the Crichton family and, over 100 years since the fateful *Terra Nova* expedition, the cabin seems a fitting memorial to the polar explorers who passed through. Following extensive damage to the region in the Canterbury earthquakes, the cabin has now been donated to the Department of Conservation (DOC), in the hope that it can be saved as a historical reminder of the Antarctic expeditions. The hut was removed from Kinsey Terrace, and gifted to Sumner in 2014, being relocated to public land on Godley Head where it awaits restoration. Open to the public, the pleasant walk offers views towards Antarctica.

[Robert Falcon Scott](#) wrote a letter to Oriana Wilson, from his tent on March 25, 1912, while he and her husband were dying on the trek back from the South Pole. It reads; (8. Letter reproduced from

*"My Dear Mrs Wilson, if this letter reaches you, Bill and I will have gone out together. We are very near it now and I should like you to know how splendid he was at the end - everlastingly cheerful and ready to sacrifice himself for others, never a word of blame to me for leading him into this mess. He is not suffering, luckily, at least only minor discomforts. His eyes have a comfortable blue look of hope and his mind is peaceful with the satisfaction of his faith in regarding himself as part of the great scheme of the Almighty. I can do no more to comfort you than to tell you that he died as he lived, a brave, true man, the best of comrades and staunchest of friends. My heart goes out to you in pity, Yours, R. Scott"*<sup>(8)</sup>.



**Uncle Bill's Cabin, Godley Head**  
© James Stone, 2015

(8. Letter reproduced from

<http://www.stuff.co.nz/the-press/news/christchurch-earthquake-2011/6821883/Cabin-link-with-Scotts-Antarctic-quest>)

# Herbert George Ponting (1870-1935)

Nicknamed 'Ponco', Herbert Ponting was born in 1870. He undertook a period of farming and mining in the western US, before making his name with photography in China and Japan.

On Scott's *Terra Nova* expedition, Ponting, preferred the title of 'camera artist' to photographer; setting himself a high standard for his work, destroying all negatives that did not come up to scratch.

At the time, both his movies and still pictures were well advanced on anything done by previous photographers.

Greatly affected by the loss of [Scott](#) and [Wilson](#), he spent many years perpetuating their memory, this included with his film '90° South'.

Ponting died in 1935 and is commemorated with *Ponting Cliff* in northern Victoria Land 71° 12'S, 168° 21'E<sup>(9)</sup>.



Herbert Ponting filming whales from the deck of *Terra Nova*  
© Canterbury Museum

To view the movie '*Ninety Degrees South*', by Herbert Ponting click [here](#).



Ponting's Skis  
© Canterbury Museum



# Roald Amundsen (1872-1928)

In the early twentieth century, the world was running out of new lands to discover, the South Pole became the main goal for many explorers.

[Scott](#) and [Shackleton](#) had made attempts to reach the Pole, but neither had succeeded., the Pole remained unconquered. Scott was not the only one with the Pole in his sights. Norwegian explorer Roald Amundsen also planned to head there.

Determined and experienced in polar travel, having learnt from indigenous peoples of the Arctic. Where reaching the South Pole was one of Scott's aims, it was Amundsen's only one.

Amundsen started his journey on 19 October 1911, setting off with five men, four sledges and 52 dogs. his group travelled quickly across the frozen landscape and as the journey progressed, dogs were killed to provide fresh meat for the other dogs as well as the Men.

Amundsen was pioneering a new route and did not know if he would find a way through the Transantarctic Mountains from the Bay of Whales on the Great Ice Barrier up onto the Polar Plateau , or to the Pole itself. Luckily, he found a glacier that opened the way. The dogs struggled, clawing their way up, but after four days they were through.

They reached their final destination on 14 December – Amundsen and his men were the first humans at the South Pole<sup>(10)</sup>.



**Roald Amundsen**  
© Royal Geographical Society



**Amundsen's sledge**  
© Canterbury Museum



**Dog harness**  
© Canterbury Museum

*"So we arrived, and were able to raise our flag at the geographical South Pole ...  
Thanks be to God!" - Diary of Roald Amundsen , 14 December, 1911.*

(10. Reproduced from Scott's Last Expedition (<http://www.scottslastexpedition.org/expedition/journey-to-the-south-pole/>))

Watch '***Celebrating 100 years: Roald Amundsen's South Pole Expedition 1911***' by clicking [here](#).

In December 1912, Amundsen gave a public lecture in Christchurch;

*"We must always remember with gratitude and admiration the first sailors who steered their vessels through storms and mists, and increased our knowledge of the lands of ice in the South."* – **Roald Amundsen**.

Amundsen's penknife used to cut the flagstaff marking the South Pole is on display in the [Canterbury Museum](#), along with a bronze bust ([Location A](#)).



**Amundsen's Penknife**  
© Canterbury Museum

Listen to '**The South Pole Antarctic expedition in the Fram 1910-1912**' as an [Audio Book](#).

# Sir Ernest Shackleton (1874-1922)

Irishman Ernest Shackleton spent time in Christchurch and [Lyttelton](#) on 5 occasions;

1. November 28, 1901-December 21, 1901, prior to the departure of the National Antarctic, *Discovery*, Expedition under [Commander R.F. Scott](#).
2. March 25, 1903-April 1903, Shackleton returned to Lyttelton on the relief ship *Morning*.
3. December 13, 1907-January 1, 1908, prior to the departure of the British Antarctic, *Nimrod* Expedition. The *Nimrod* and her crew having arrived in Lyttelton on November 23, 1907.
4. March 25, 1909-April 16, 1909, the return of the *Nimrod*.
5. February 9, 1917- March 1917, the return of the *Aurora* which had rescued the [Ross Sea Party](#) of Shackleton's Imperial Trans-Antarctic, *Endurance*, Expedition, who had been stranded after their ship had blown out to sea.

Shackleton first travelled to Antarctica with **Scott** (*Discovery* 1901-1903) but suffered badly on the expedition and was invalided out on the relief ship *Morning*, returning to Lyttelton on 25 March 1903.

Both Shackleton and Captain Colbeck of the *Morning* spoke highly of the hospitality and kindness shown by their friends in Canterbury. While the vessel was in port the crew were provided with free railway passes and fruit. Shackleton was also careful to express the thanks of the *Discovery* men for the generosity of Canterbury citizens in providing an organ to assist with Sunday services, and to the farmers in providing sheep for the expedition,



Shackleton, Scott and Wilson ready for the attempt to reach the South Pole

© Royal Geographical Society

*"The 13 mutton supplied to the Discovery by the Canterbury farmers was highly appreciated...a special treat on Sundays, and when the men were served their toddies, the toast of the Canterbury farmers was regularly drunk".*

In September 1907 he was back to try and reach the South Pole again with his own expedition – the British Antarctic or *Nimrod* Expedition<sup>(11)</sup>.



(11. Reproduced from Shackleton's Connections with Canterbury, 1901-1917" by Jane Ellis, GCAS, University of Canterbury (<http://www.anta.canterbury.ac.nz/documents/GCAS%20electronic%20projects/Jane%20Ellis%20Project.pdf>))

New Zealand was encouraged to help as other nations were also interested in the South Pole, and it was important for Britain to get the prize. It was also pointed out that New Zealand would benefit from the magnetic survey that Shackleton was to undertake, and from the collections of Antarctic animals and insects to be given to New Zealand museums. [Lyttelton](#) is again used as the expedition's New Zealand base, receiving significant support from both the government of New Zealand and the public.

*"It must be regarded...a piece of good fortune that for a second time within five years, the eyes of the world should be directed to New Zealand as the base from which a determined attempt is being made to wrest from the South Pole, its secrets"*

Shackleton went further, *"and let me say what we will do for New Zealand and Australia. If we find important geographical discoveries Australia and New Zealand will be remembered in naming them...maybe a Mt Wellington or Mt Christchurch...I will bring back skins of Antarctic petrels,...and live Emperor and Adelie penguins for the Acclimatisation Society's garden in Christchurch"*.

[Joseph Kinsey](#) hosted a private dinner for the officers and scientists of the expedition at the [Canterbury Club \(Location F\)](#) in Worcester Street on 30 December, two nights before they sailed. The *Nimrod* Expedition Leaves Lyttelton on New Year's Day 1908. Large crowds turned up to see the Manchurian ponies being brought over from [Quail Island \(Location j\)](#). Many were also interested in the *Koonya* and looking at the heating and clothing provided for the crew. By late afternoon, it was estimated that around 50,000 people had gathered on the wharf and hills to [farewell the Nimrod](#). Shackleton invited Mr George Buckley, a friend and financial supporter of the expedition, to accompany him as far as the ice, and return on the *Koonya* which he did. *Nimrod* left the **Gladstone Pier (Location i)** at 4pm. Her departure was heralded by all the steamers in Port sounding their sirens, and a 64 pounder firing a salute on Sumner Road. The **tugship Canterbury** (later [Tug Lyttelton \(Location b\)](#)), crowded with passengers, and many other vessels, accompanied the *Nimrod* to the Heads. Many of these vessels were overcrowded and listing to one side. Shackleton gave a farewell message,

*"This farewell from New Zealand has been unparalleled in the history of polar exploration for the kindness and warmth of enthusiasm manifested by a genuine people... This expedition will never forget the send-off you have given us"*<sup>(12)</sup>.

(12. Reproduced from Shackleton's Connections with Canterbury, 1901-1917" by Jane Ellis, GCAS, University of Canterbury)

*Nimrod* is towed all the way to the Ross Sea by the *Koonya* to conserve her coal supply.



Crowd on the Lyttelton Wharf for departure of the *Nimrod*, January 1, 1908.  
*Lyttelton Times.*



Tug *Canterbury* and *Nimrod*, Lyttelton Harbour  
January 1, 1908



Watch the '*Departure of Shackleton's Nimrod from Lyttelton, 1908*' [here](#).

On 9 Jan 1909 only 97miles from the South Pole, Shackleton makes the decision to retreat back to the north, saving his men.



**"I thought, dear, that you would rather  
have a live ass than a dead lion."**

**Sir Ernest Shackleton to his wife Emily, after deciding to  
turn back 97 miles from the South Pole.**

*Nimrod* returns to an enthusiastic and excited welcome on March 25 1909. A Thanksgiving Service for the safety and achievements of the expedition was held in [Christchurch Cathedral \(Location D\)](#) on Sunday, 28 March and Shackleton gave a public lecture on Wednesday 7 April at **His Majesty's Theatre**. The money Shackleton made from this lecture was all given away, another gesture that endeared him to the people of Canterbury. Half to the **children's ward at Christchurch Hospital**, and the other half, £83, to the Christchurch Technical Institute to help them build a Girls' Training Hostel at [90 Ensors Road \(Location S\)](#) where Domestic Science could be taught. He also gave a comprehensive geological and zoological collection to the [Canterbury Museum \(Location A\)](#).

Shackleton made significant connections with Canterbury families such as the Tripp family of Orari Gorge Station, the Saunders family of [Lyttelton](#) and the daughters of Captain Hatchwell who ran a navigation school with their father, and entertained Shackleton, at their home, [Devonia Cottage](#), 10a Bridle Path Road, Lyttelton **(Location f)**. He also reacquainted himself with Edward Saunders, a reporter for the Lyttelton Times who had interviewed him in 1907. Shackleton decided to employ him to help write a book. Saunders returned to England with Shackleton becoming his private secretary for four months. Shackleton even naming his son after him. The book, *The Heart of the Antarctic* was published in November 1909 to great acclaim. Saunders became 'Shackleton's ghost writer' after the rescue of the [Ross Sea Party](#) assisting with the writing of *South*, the official account of the *Endurance* Expedition<sup>(13)</sup>.

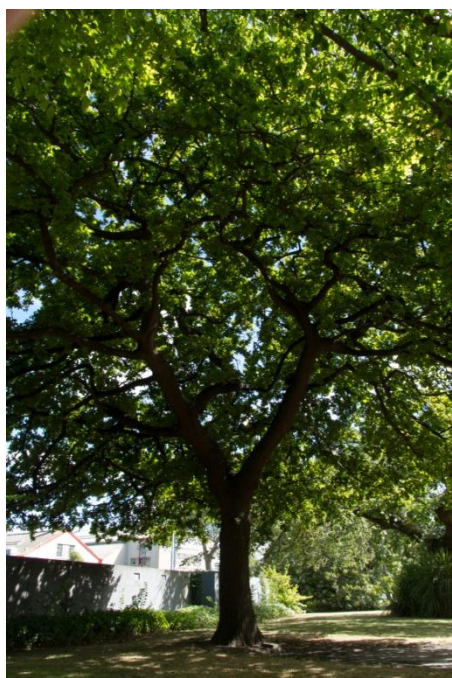
(13. Reproduced from Shackleton's Connections with Canterbury, 1901-1917" by Jane Ellis, GCAS, University of Canterbury (<http://www.anta.canterbury.ac.nz/documents/GCAS%20electronic%20projects/Jane%20Ellis%20Project.pdf>))

Shackleton again visited New Zealand in December 1916 while trying to organise the rescue of the stranded Ross Sea Party. During this time he was based in Wellington. The *Aurora* returned to Wellington on February 10, 1917 having successfully rescued the Ross Sea Party.

Sir Ernest Shackleton's Final Visit to Canterbury (He had been knighted after the *Nimrod* Expedition was February 24 1917. A Civil Reception was held on his arrival at the Municipal Chambers. Shackleton said that

*"Christchurch had many happy associations for him".*

He also made reference to the [statue of Scott \(Location E\)](#) that had been recently unveiled in Christchurch, and gave a tribute to the work of Frank Wild who had led the Elephant Island men. He was invited to afternoon tea at the Girls' Training Hostel at [90 Ensors Road](#). The occasion of his visit was marked by planting an oak tree ([Location S](#)) on the front lawn<sup>(14)</sup>.



Shackleton's Oak, 90 Ensors Road

© James Stone, 2015



(14. Reproduced from Shackleton's Connections with Canterbury, 1901-1917" by Jane Ellis, GCAS, University of Canterbury (<http://www.anta.canterbury.ac.nz/documents/GCAS%20electronic%20projects/Jane%20Ellis%20Project.pdf>))

# Frank Arthur Worsley (1872-1943)

Antarctic Adventurer Frank Worsley was Captain of *Endurance* and Shackleton's navigator for the 1914-1917 Imperial Trans-Antarctic Expedition.

Born in [Akaroa](#) in February 1872, his navigational skill safely brought the 6.7m *James Caird* across 1300km of the Southern Ocean from Elephant Island to South Georgia after the *Endurance* was crushed by ice in the Weddell Sea, in so doing, saving the lives of all of Shackleton's men.

At the age of 27 after years of maritime experience in New Zealand, Worsley saw and responded to Shackleton's advertisement, reportedly following a dream about navigating ships down a street in London full of ice blocks! He was immediately appointed to the role of Captain, and sailed *Endurance* first to Buenos Aires, then on to South Georgia.

*Endurance* became stuck in pack ice in the Weddell Sea when two months out from South Georgia, during the summer of 1914. After *Endurance* was crushed by the ice in October 1915, the men dragged three of the lifeboats over the ice in hope of reaching land. When they were forced to take to the lifeboats in April 1916, after the ice floe broke up around them, Worsley successfully navigated them all to Elephant Island. With little chance of rescue from Elephant Island, the *James Caird* was converted to a tiny open sailboat, and Worsley, [Shackleton](#) and four other men set off on the 1300km journey to South Georgia to effect a rescue.

With '*an astonishing feat of navigation*', Worsley navigated the party to South Georgia safely, taking only four sightings over the 16-day journey. The voyage is still considered '*one of the greatest boat journeys ever accomplished*'

Memorabilia is preserved in the [Akaroa Museum](#) ([Location I](#)).

Watch '*Survival: The Shackleton Story*' (National Geographic Creative) [here](#).

Arriving on the west coast of South Georgia on 10 May 1916, their Ordeal was not over, Worsley, Shackleton and Thomas Crean still had an arduous 36-hour mountainous journey to reach the Stromness Whaling station. Worsley set off a day later to rescue the other members of the lifeboat party. In the following four months, Worsley and Shackleton made four attempts to rescue the remaining men from Elephant Island.

Frank then accompanied Shackleton to New Zealand aiming to assist the Ross Sea Party rescue, only to stand aside during negotiations with John King Davis.

Back in England in April 1917 Worsley returned to the Royal Navy serving in the First World War. Shackleton later requested his assistance organising the North Russia Expeditionary Force sent by the Allies to support anti-Bolshevik forces.

Worsley again joined Shackleton in 1921 as navigator and hydrographer on the *Quest*, which was to be Shackleton's final expedition to the Antarctic in 1922. However, their next Antarctic adventure never eventuated<sup>(15)</sup>.



**Frank Worsley, July 1903.**  
*Taken by Herman John Schmidt.*

(15. Modified from 'Frank Worsley and Antarctica' New Zealand History (<http://www.nzhistory.net.nz/media/photo/frank-worsley>)

On 5 January 1922, Shackleton died in South Georgia. This was Worsley's last expedition to Antarctica, but he lectured and wrote about his Antarctic adventures for many years to come.

Worsley died in February 1943, honoured with a full naval funeral. His ashes were scattered at sea<sup>(16)</sup>.

Worsley memorabilia is preserved in the [Akaroa Museum \(Location l\)](#), his [childhood home \(Location m\)](#), and a [bust \(Location n\)](#) are also located in Akaroa.

More about the [Endurance expedition party](#).

## The Ross Sea Party

Throughout the *Endurance* Expedition, the supporting Ross Sea Party, tasked with laying depots for the crossing of the Antarctic continent, was unaware of Shackleton's problems in the Weddell Sea. Their vessel, the *Aurora*, arrived in Antarctica in January 1915 and a shore party immediately set about establishing a base at Cape Evans to lay depots.

Many setbacks were faced during their first season, including the death of ten dogs, and their problems were compounded in May when the *Aurora* became trapped in sea ice and was carried away in a storm - along with two members of the shore party and most of their supplies.

Despite these difficulties, the remaining shore party of 10 carried out their depot-laying tasks the following season, firm in the belief that the lives of Shackleton and his men were dependent upon them.

New Zealand provided assistance to the *Aurora* in the latter stages of her journey, and she finally made it to Port Chalmers on 2 April 1916, almost a year since she had been carried from Antarctica, stranding the shore party.

Conflict arose over which party should be given priority, as there was also no news of the Weddell Sea Party. The British, Australian and New Zealand governments eventually agreed to contribute funds to a rescue mission to the Ross Sea, the New Zealand government also agreed to cover the crew's wages<sup>(17)</sup>.

(16. Reproduced from 'Frank Worsley and Antarctica' New Zealand History (<http://www.nzhistory.net.nz/media/photo/frank-worsley>) 20

17. Reproduced from 'Endurance expedition parties' New Zealand History (<http://www.nzhistory.net.nz/media/interactive/shackleton-sea-parties>)





THE AURORA  
With Shackleton's party member

**The *Aurora*, pictured in New Zealand after the drift.**

[wikipedia.org](http://wikipedia.org)

News arrived of the Weddell Sea Party as the *Aurora* was being readied. Shackleton learned there one more rescue was still needed – but he had to fight to be involved.

The governments now claimed ownership of the *Aurora*, and insisted that she was captained by John King Davis. The New Zealand Minister of Marine Affairs, Robert McNab intervened, and an agreement was reached between Shackleton and Davis. The *Aurora* left Port Chalmers on 20 December 1916, with Davis as captain and Shackleton signed on as a supernumerary officer.

The *Aurora* was sighted by the Ross Sea Party on the morning of 10 January 1917 with [Shackleton](#), [Worsley](#) and Stenhouse aboard. In the hours that followed Shackleton learned that three of his men had died, while the seven survivors discovered that all their efforts had been in vain.

The Ross Sea Party and their rescuers arrived in Wellington on 9 February to a heroes' welcome. However, interest in their story was quickly lost during the First World War<sup>(18)</sup>.

Shackleton returned to Christchurch following the successful rescue of the Ross Sea Party of the Imperial Trans-Antarctic Expedition in January 1917.

You can learn about some recently unearthed photos from that part of the expedition [here](#).

(18. Reproduced from 'Endurance expedition parties' New Zealand History (<http://www.nzhistory.net.nz/media/interactive/shackleton-sea-parties>)

# Sir Douglas Mawson (1882-1958)

Douglas Mawson was physicist on Shackleton's *Nimrod* expedition so presumably visited [Lyttelton](#) for the departure and return of the expedition.

He was a member of the party to first climb Mt. Erebus in March 1908. Edgeworth David, A. F. Mackay and Mawson were the first to reach the vicinity of the South Magnetic Pole the following summer, manhauling their sledges more than 2000km.

Mawson went on to lead the Australasian Antarctic Expedition, departing Australia in December 1911 aboard the *Aurora*. He pursued scientific investigations across many disciplines including geology, geomagnetism, cartography and biology, as well an extensive marine science programme.

Listen as New Zealander Eric Norman Webb from Lyttelton [recalls his time as chief magnetician](#) on Douglas Mawson's Australasian Antarctic Expedition 1911-1914. Webb was a graduate of Canterbury College, University of New Zealand and served as chief magnetician at Cape Denison. He was also a member of the three-man southern sledging party led by Bage, man-hauling inland for nearly 300 miles to the estimated site of the South Magnetic Pole, 600 miles in 62 days between November 1912 – January 1913.



**'Leaning on the Wind'**

*By Captain Frank Hurley O.B.E.*

## The IGY and the Scientific Age

Following the Heroic Era of Antarctic exploration and the war-years, the next chapter of Antarctic interest was the Scientific Age with the International geophysical Year (IGY) of 1957-1959. This was a [period of intense activity](#) in the Antarctic, during which New Zealand also contributed directly to the [Commonwealth Trans-Antarctic Expedition](#) (TAE).

Vessels, aircraft and personnel from the American [Operation Deep Freeze](#) also started to use New Zealand as a base for their expeditions, a tradition that continues to the present day.

# Operation Deep Freeze



Operation Deep Freeze refers to the US Navy operations which started during the International Geophysical Year. The initial Operation Deep Freeze I ran from 1955 to 1956 and was followed by Operation Deep Freeze II, III and so on.

The US Navy Air Development Squadron Six [VX-6] was formed on 17 January 1955 to provide air support operations in the Antarctic between 1955 and 1959 (Operation Deep Freeze I-IV), tasked with setting up facilities and supporting US scientists in their contribution to the IGY.

A variety of aircraft were assigned to the squadron to see which was the most suitable for Antarctic conditions. Eight larger aircraft were selected to make the voyage south from New Zealand:

- Two ski-equipped Lockheed P2V-2N Neptunes
- Two Douglas R5D Skymasters
- Two ski-equipped Douglas R4D Skytrains (referred to as Dakotas)
- Two Grumman UF-1 Albatross triphibians

The aircraft arrived at the RNZAF's [Wigram aerodrome](#) in Christchurch between October and December 1955.

On 10 December USS *Glacier*, one of the Navy's icebreakers, left New Zealand to prepare the ice runway for the aircraft. Six other navy vessels left on 16 December to take up positions over the 3860-km route between Campbell Island and Antarctica. These 'picket ships' assisted with radio communications and weather reports during the initial flights, but were also there to assist in search and rescue should it be required. Search and rescue personnel in Wellington were on standby to alert an RNZAF Sunderland flying boat specially stationed at Bluff.

The ice runway at McMurdo Sound was completed on 19 December 1955, and the squadron was advised to be ready to take off the following day.

On 20 December, 150 people gathered to watch the first aircraft, a Neptune, leave from Harewood at 4.59 a.m. It was followed by another Neptune at 5.14 a.m., and then by the Skymasters at 8.15 a.m. and 8.33 a.m.

The first Neptune arrived at McMurdo Sound 14 hours later to a smaller gathering of around 20 people. The pilot describing the flight as 'dull'.

On the same day Skytrains and Albatrosses left from Taeiri shortly after 6.45 a.m. But all four aircraft were forced to turn back due to strong headwinds - despite the determination of some to carry on<sup>(19)</sup>.

(19.Reproduced from 'First flights to Antarctica' New Zealand History  
(<http://www.nzhistory.net.nz/media/interactive/antarctica-aeroplane>)



Despite this setback, the mission had been accomplished, it was possible to fly to Antarctica from the outside world. The frozen continent was no longer wholly isolated; by air it was now 10 hours away, not 10 days or 10 weeks.

The squadron was renamed the Antarctic Development Squadron Six (VXE-6) in 1969, and continued to provide logistical air support for US operations in the Antarctic until it was disestablished in March 1999 because of Navy downsizing.

The Air National Guard has subsequently taken over its responsibilities<sup>(20)</sup>.

Today, the New York Air National Guard operates LC-130 (ski-equipped) aeroplanes for both the US and NZ Antarctic Programmes.



**Ski-equipped LC-130 Hercules at William's Field airstrip, Ross Ice Shelf**

© James Stone, 2015

A C17 Globemaster, operated by the US Air Force, also flies regularly during the summer season from [Christchurch International Airport \(Location K\)](#) to Antarctica.

[Listen to a description by Lieutenant Commander Bill Smith](#), Royal New Zealand Navy, of the arrival and landing of the first flight to Antarctica on 20 December 1955. Smith was in the Antarctic with Operation Deep Freeze to scout for unloading sites for HMNZS *Endeavour*, which would be heading south the following summer with personnel and supplies for the [Commonwealth Trans-Antarctic Expedition](#) (1955-58). Following this, another unnamed individual interviews Lieutenant Commander John (Jack) Torbert, the pilot of the first of the aircraft to land in Antarctica, P2V-2N Neptune #124466.

A US Antarctic Program DC3 aeroplane used for US supply missions to and within Antarctica during the 1960s is on display at [Ferrymead Heritage Park \(Location U\)](#). A Douglas LC47H BuNo17221 is also on display, this aircraft was not used on the initial flights south but did serve in the Antarctic from 1963 to 1966, manned by members of the US Navy Air Development Squadron Six [VX-6]. It was presented to the City of Christchurch to mark the role aircraft of its type played in the Antarctic, and to honour the hospitality the city's residents had shown to the staff of the United States Antarctic Research Program.

(20. Reproduced from 'First flights to Antarctica' New Zealand History  
(<http://www.nzhistory.net.nz/media/interactive/antarctica-aeroplane>)



# First Māori Connection

**Louis Hauiti Potaka**, born in Wanganui in March 1901, was the fifth Māori medical graduate in New Zealand. He served in Richard Byrd's second Antarctic expedition (BAE2) in 1934 as a Doctor for one year.

Byrd learnt that the expedition's original doctor, Dr Guy Shirey, had blood pressure problems and would not be fit to spend the winter in the Antarctic. Needing to find a replacement, he urgently placed advertisements in the New Zealand press, if a doctor could not be found, the expedition would have to be cancelled.

Radio message from Byrd to Wellington:

***"MUST GET A DOCTOR SOMEHOW STOP PLEASE  
MOVE HEAVEN AND EARTH TO GET COMPETENT  
DOCTOR TO VOLUNTEER HELP US OUT STOP"***

Potaka was one of the doctors to respond, he had some experience and set his fee 'low enough to give himself a realistic chance of being recruited'. Byrd agreed that Potaka was the best candidate.

***"WILLING TO PAY THE MAORI 350 POUNDS STOP HE LOOKS  
LIKE THE BEST HAVE NO OBJECTIONS TO HIS BEING ONE THIRD  
MAORI STOP HE HAD BETTER BRING INSTRUMENTS HE HAS"***

Potaka was selected, and left from Auckland within a few days on the British research ship *Discovery II*. Potaka was transferred to one of expedition's vessels, *Bear of Oakland*, further south and Potaka for the remainder of the journey to Little America in Antarctica, arriving on 26 February 1934.

Within weeks Louis performed an emergency appendectomy on cameraman Joseph Pelter, probably saving his life. During another incident in August an expedition member fractured his arm in an auto-giro crash, however, much of Potaka's time in Antarctica was uneventful. He performed monthly medical examinations on the wintering team and dealt with problems such as frostbite and dentistry. He also recommended no physical labour be undertaken in temperatures lower than -45degrees due to frosting on the lungs, and he professionally advised Byrd against flying solo in relation to Byrd's weak heart. Drunkenness was a common problem on base, and Potaka reportedly confiscated and dumped much of the alcohol he found.

As well as the human patients, Potaka was also the attending physician when the dogs gave birth to puppies in the huts. Potaka did not escape injury himself becoming badly snow blind at one time which he treated with drops of cocaine.

On his return to New Zealand in February 1935 he remarked that he had enjoyed his experience but was glad to be back. Commenting on the general health of the men under his care at Little America, he said their health had been good throughout,

***'I do not know of any self-respecting germ which would live down there'***<sup>(21)</sup>.



Newspaper clipping showing Dr Louis Potaka at the time he left to join Byrd's second Antarctic expedition, 1934.

# The IGY and the Scientific Age

**Key events of the Scientific Age that involve New Zealand included<sup>(22)</sup>:**

**14 May 1955:** the New Zealand government agreed to contribute £50,000 towards the costs of the proposed [Commonwealth TAE](#) and to set up a committee to organise a terminal base for the crossing party.

**26 May 1955** the Ross Sea Committee of the TAE was established to coordinate New Zealand's contribution to the expedition (and later to the IGY).

**20 December 1955** the [first long-distance flights into Antarctica](#) from the outside world left from New Zealand.

**1 May 1956** the Royal New Zealand Air Force (RNZAF) Antarctic Flight was formed, to scout the route for the New Zealand component of the TAE, to air-supply depots and to provide emergency backup. It continued this role until 1960.

**20 January 1957** [Scott Base](#) opens at Pram Point.

**31 January 1957** Hallett Station, a joint New Zealand-United States operation, opened at Cape Adare.

**4 January 1958** Sir Edmund Hillary and his party became the [first to reach the South Pole overland](#) since Scott in 1912.

**26 February 1958** the New Zealand Cabinet approved in principal an extension to scientific work into 1959 as part of an extended world IGY programme (termed International Geophysical Cooperation)

**2 March 1958** Sir Vivian Fuchs and his party completed the first successful trans-Antarctic crossing.

**24 March 1958** responsibility for coordinating New Zealand's activities in the Ross Dependency was given to the Minister in Charge of Scientific and Industrial Research. A Ross Dependency Research Committee (RSDC) was appointed to advise and assist the Minister. The Geophysics Division of the Department of Scientific and Industrial Research (DSIR) continued to implement the Antarctic programme.

**19 November 1959** New Zealand engineer [Tom Couzens is killed](#) when the Sno-Cat he is driving falls into a 30-m-deep crevice.

In early 1959 DSIR establishes an Antarctic Division to work with the RSDC on New Zealand's activities in the Ross Dependency. It becomes known as the New Zealand Antarctic Research Programme (NZARP). It is initially based in Wellington.

**1 December 1959** New Zealand and 11 other countries active in Antarctica during the International Geophysical Year sign the Antarctic Treaty. The signatories agree that the area will be used for 'peaceful purposes only', that 'scientific investigation and cooperation would continue', and that they will put aside any claims and disputes over territorial sovereignty while the treaty is in force.

Arrival Heights, an unmanned observation hut, is established about 5 km from Scott Base.

**3 May 1962** Scott Base became a permanent Antarctic station in recognition of the value and importance of the science being conducted in the Antarctic, maintained by NZARP.

# Hillary's Trans-Antarctic Expedition (TAE) (1955-1958)

In December 1956, *HMNZS Endeavour* left New Zealand for Antarctica to support both the Commonwealth Trans Antarctic Expedition (TAE) and the [International Geophysical Year \(IGY\)](#) with a major programme of science.

Fresh from conquering Mount Everest in 1953, Edmund Hillary was enlisted to lead the New Zealand party that would lay supply depots from the Ross Sea towards the South Pole for the first trans-Antarctic crossing. Led by the then Dr Vivian Fuchs. The expedition planned to cross the continent from the Weddell Sea. Pram Point, on the edge of the McMurdo ice shelf and four kilometres from the United States' McMurdo Station, was chosen as the site for Scott Base.



Hillary and his team in Antarctica on their  
TE 20 Fergusson tractors.

In January 1957 the team completed the buildings (six inter-connecting units and three detached science buildings) that would form the antecedents of the modern-day [Scott Base](#). A party of 23 men wintered over at the newly formed base.

Using Fergusson tractors, and ably supported dogs and aircraft, Hillary succeeded in completing his task for the TAE and, in a final push, gained the South Pole, accomplishing the third ever overland trip to the Pole, following in the footsteps of [Road Amundsen](#) and [Robert Falcon Scott](#).

Two months later Fuchs' party arrived at Scott Base to world acclaim, completing the first overland crossing of the Antarctic continent and gathering useful scientific information on the way.

In a little more than a year on the Ice, Hillary's TAE/IGY party had established Scott Base, supported Fuchs and explored and mapped considerable areas of the Ross Sea region and the Transantarctic Mountains, laying the foundations for the more detailed mapping and geology that were to follow<sup>(23)</sup>.

Hillary's Fergusson tractor and Fuchs' Sno Cat are displayed at the [Canterbury Museum](#) ([Location A](#)).



The sno-cat driven by  
Sir Vivian Fuchs in 1958  
© Antarctic Heritage Trust



(23. Reproduced from New Zealand Antarctic Heritage Trust  
(<http://www.nzah.org/AHT/HistoryHillarysHut/>)





# NZ Antarctic Heritage

Footage of New Zealand's relationship with Antarctica and the explorers and scientists who went there can be viewed [here](#).

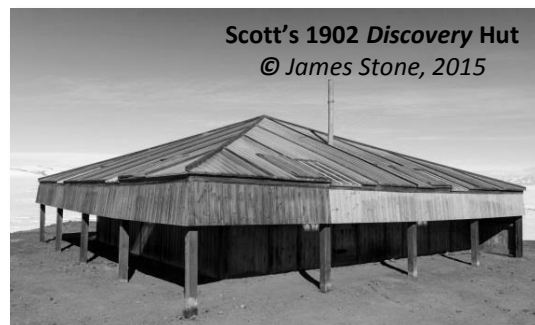
The work and legacy of these historic explorers is now being conserved and preserved by the [Antarctic Heritage Trust](#) (NZAHT), a not-for-profit organisation responsible for the conservation of five historic sites on Ross Island in Antarctica. (For history of the huts preceding the NZAHT, [click here](#)).

The sites include:

Robert Falcon Scott's 1902 **Discovery Hut** at Hut Point, and

1911 [Terra Nova Hut](#) at Cape Evans

Ernest [Shackleton's Hut](#) at Cape Royds from 1908, and Edmund Hillary's **TAE Hut** at Scott Base.



View the work of the NZ Antarctic Heritage Trust [here](#).

The Trust is in the process of implementing the largest heritage project ever undertaken in the Polar Regions, - the '*Ross Sea Heritage Restoration Project*', a multi-year, multi-site conservation project, employing teams of international heritage and conservation specialists year-round in Antarctica. To date, the Trust has meticulously conserved two iconic buildings (Scott's 1911 expedition base and Shackleton's 1908 base) caring for 17,000 objects. Work is currently underway to conserve Scott's 1902 expedition base.

Communicating the Trust's work and connecting people with the stories of the early polar explorers is an important component of the NZAHT outreach. Recent success stories include the discovery and restoration of Levick's notebook, lost [photos from the Ross Sea party](#) and recreation of [Shackleton's Whisky](#).

## Levick's Notebook

In 2013 melt water run-off exposed a notebook near Scott's *Terra Nova* Hut at Cape Evans for the first time in more than 100 years.

The notebook is a "Wellcome Photographic Exposure Record and Dairy 1910", belonging to George Murray Levick (1876-1956), surgeon, zoologist and photographer, his name clearly written in the opening pages.

Levick was a part of Scott's 1910-1913 expedition and a member of the Northern Party.

The notebook contains his pencil notes detailing the date, subjects and exposure details for the photographs he took during 1911 while at Cape Adare<sup>(24)</sup>.



View the story of Levick's Notebook [here](#).

(24. Reproduced from New Zealand Antarctic Heritage Trust (<http://www.nzaht.org/AHT/Levicks-notebook/>))

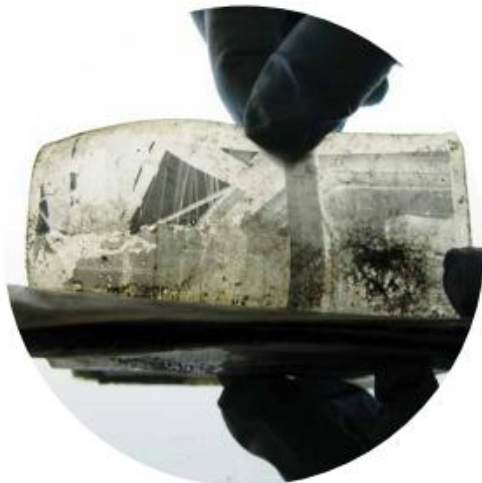


## Ross Sea Party's Lost Photographs

In 2013, the Trust's conservation team discovered photographic negatives left a century ago in Captain Scott's last *Terra Nova* Hut. The story of Shackleton's Ross Sea Party's 'lost photographs' captured imaginations the world over, drawing people into the heroic world of polar exploration and the Trust's conservation work in Antarctica.

The Trust's conservation specialists, working in expedition photographer [Herbert Ponting's](#) darkroom at Scott's 1911 Cape Evans expedition base, discovered a small box that held cellulose nitrate negatives that were clumped together. The discovery sparked speculation as to what the negatives might reveal. The negatives were removed from Antarctica and detailed conservation treatment back in New Zealand painstakingly separated the negatives, revealing twenty-two never-before seen Antarctic images.

The photographs are from Ernest Shackleton's [Ross Sea Party](#) (1914-1917), that spent time living in Scott's hut after being stranded on Ross Island when their ship, the *Aurora* blew out to sea.



The 22 cellulose nitrate negatives from Herbert Ponting's darkroom before conservation treatment.

Although many of the images were damaged, the Trust was able to recognise landmarks around McMurdo Sound. One of the most striking images is almost certainly of Ross Sea Party member Alexander Stevens, Shackleton's Chief Scientist, standing on board the *Aurora*. Although the identity of the photographer remains unknown, it is thought to be expedition photographer Reverend Arnold Spencer-Smith<sup>(25)</sup>.

See the story of the Ross Sea Photographs [here](#).

## Shackleton's Whisky

In January 2010 the Trust's team of conservators excavated five crates from beneath Sir Ernest Shackleton's 1908 base in Antarctica. Three were labelled as containing Mackinlay's whisky and two labelled as containing brandy.

One of the whisky crates was flown back to New Zealand and in collaboration with [Canterbury Museum](#), the crate was thawed and eleven whisky bottles revealed.

In January 2011 three of the bottles were flown to Whyte & Mackay (the owners of the Mackinlay's brand in Scotland) for scientific analysis. Richard Paterson, Whyte & Mackay's master blender, recreated the century-old whisky, marrying and blending a range of malts to get an exact replica of the original enjoyed by Shackleton and his men 100 years ago. The glass manufacturer even had to switch off all 'quality controls' to make the bottle as imperfect as the original.



In January 2013 New Zealand Prime Minister John Key returned the three bottles to the Trust in Antarctica. The bottles were then conserved and returned to Shackleton's Hut at Cape Royds.

A percentage of Whisky sales will continue to benefit the Trust's conservation programme in Antarctica<sup>(26)</sup>.

Watch the story of Shackleton's Whisky [here](#).



## New Zealand Antarctic Society

Formed in 1933, the New Zealand Antarctic Society has branches in New Zealand's main centres and an international membership. It publishes the 'Antarctic' journal four times a year, a periodical providing regular news of the activities of all nations working in both the Antarctic and sub-Antarctic.

The Society organises an annual wreath laying ceremony to commemorate all those who have lost their lives in Antarctica at the time of the Antarctic Season Opening.

The Society brings people together who are interested in Antarctica to share knowledge in the science, exploration and discovery of Antarctica, to seek protection of the Antarctic environment and to promote New Zealand's interests in Antarctica.

The inaugural meeting of the Society on 2 November 1933 was organised by Arthur Leigh Hunt, a man with a strong personal interest in the Antarctic stemming from his friendships with American explorer and aviator Richard E. Byrd and Australian explorer and geologist [Douglas Mawson](#).

Since this first meeting the Society has been involved in a wide range of Antarctic activities, actively lobbying the government to commit resources to the Antarctic prior to the [Commonwealth Trans-Antarctic Expedition](#) (1955-58) and the IGY 1957/1958. It also played a significant role in the survival of [Ross Sea Huts of Antarctica](#)<sup>(27)</sup>.

## **Antarctic Adventure Film Series**

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-1>

Part one of the film *Antarctic Adventure*. The New Zealand section of the Commonwealth Trans-Antarctic Expedition, led by Sir Edmund Hillary, sails from Wellington to the Ross Sea in HMNZS *Endeavour*.

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-2>

Part two of the film *Antarctic Adventure* shows the New Zealand section of the Commonwealth Trans-Antarctic Expedition in Antarctica, including the selection of the site for Scott Base at Pram Point.

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-3>

Part three of the film *Antarctic Adventure* shows the New Zealand section of the Commonwealth Trans-Antarctic Expedition laying the foundations for Scott Base and putting together the prefabricated building.

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-4>

Part four of the film *Antarctic Adventure* shows men from HMNZS *Endeavour* visiting Shackleton's hut at Cape Royds and Scott's hut at Cape Evans.

# Scott Base



**Flag-raising ceremony at the opening of Scott Base on 20 January 1957. The New Zealand flag was raised on a flagstaff that had been used by Scott at Hut Point in 1903.**

<http://www.nzhistory.net.nz/media/photo/opening-scott-base-1957>

Scott Base is New Zealand's Antarctic Research Station and has been a permanent base in Antarctica, since 1959 (named after Antarctic explorer Robert Falcon Scott).

Capable of hosting up to 85 people, Scott Base provides accommodation and services for research parties and groups who visit Antarctica.

Painted in traditional Chelsea Cucumber Green, Scott Base is situated on Pram Point, Ross Island, 3km from the large US base of McMurdo Station.

For a Google Street View panorama overlooking Scott Base and McMurdo from the top of Observation Hill, [click here](#).



**Scott Base from the air, with Mt Erebus behind.**

*© James Stone, 2015*

The history of Scott Base can be further investigated [here](#).



# International Collaboration

International collaboration is almost a prerequisite for working in the Antarctic, and is encouraged under both the Antarctic Treaty and the Madrid Protocol. Collaboration is common when it comes to the logistics involved in supporting scientific activities in Antarctica, especially so at the main 'gateway cities' for the route south. Christchurch is no exception, and currently hosts the national Antarctic programmes of not only New Zealand, but the United States, Italy and Korea. The main headquarters for these operations is based at the **Antarctic Campus**, 38 Orchard Road, Harewood, adjacent to the International Airport ([Location I](#)).

## 1. [Antarctica New Zealand](#)

The New Zealand Antarctic Institute, known as Antarctica New Zealand, was established 1 July 1996 by the New Zealand Antarctic Institute Act. It is the Crown Entity responsible for developing, managing and executing NZ Government activities in Antarctica and the Southern Ocean, in particular the Ross Dependency, for the benefit of present and future generations of New Zealanders. .

An annual budget of \$15million is used to facilitate key activities including supporting scientific research, conserving the intrinsic values of Antarctica and the Southern Ocean and raising public awareness of the international significance of the continent. All activities are conducted so as to minimise the risks to personnel as far as is reasonable. \_

Antarctica New Zealand manages [Scott Base](#), New Zealand's Antarctic Research Station and permanent base in Antarctica, since 1959 (named after Antarctic explorer Robert Falcon Scott). The base provides services and accommodation for the many research parties and groups who visit Antarctica during the summer, hosting up to 85 people.



## 2. [United States Antarctic Program](#)



The National Science Foundation (NSF), an independent US government agency, manages the US Antarctic Program (USAP). NSF's Division of Polar Programs (POLAR) coordinates all US scientific research on the southernmost continent and aboard ships in the Southern Ocean as well as related logistics support. The USAP has had a close association with Canterbury since 1928 when Admiral Richard Byrd made his first visit.

Through the Lockheed-Martin Antarctic Support Contract, PAE NZ operates the USAP, commonly known as [Operation Deep Freeze](#). Operation Deep Freeze presence in Christchurch dates back to the 1950s<sup>(28)</sup>.



(28. Reproduced from Christchurch City Council: Christchurch's Antarctic Gateway status, relationships and history (<http://www.ccc.govt.nz/thecouncil/sistercities/antarcticrelations.aspx>)

### 3. Italian Antarctic Program

(Programma Nazionale di Ricerche in Antartide (PNRA))

The Italians have used Christchurch as their base to service their Zucchelli research station at Terra Nova Bay in the Ross Sea, which was built in 1986. The base supports around 70 people and operates during the summer months October to February, hosting a variety of scientific projects.



The *Italica* has been a regular visitor to the port of [Lyttelton](#) over the years

### 4. Korean Polar Research Institute (KOPRI)



In 2012 the Republic of Korea and New Zealand signed an Antarctic Co-operation Agreement. The Korean Antarctic Program (KOPRI) will service its new base Jang Bogo Station, Terra Nova Bay, from Christchurch.

KOPRI's icebreaker, *Araon*, frequents Lyttelton on its way to and from Antarctica over the summer months<sup>(29)</sup>.

**Araon berthed at  
Lyttelton, 2014.**



### (5.) **Chinese Arctic and Antarctic Administration (CAA)**



**Xue Long berthed at  
Lyttelton, 2015.**

© James Stone

Increasing international collaboration on scientific projects with Chinese scientists, and recent visits to Lyttelton by the Chinese icebreaker and polar research vessel the *Xue Long* have fuelled speculation as to whether China may soon base it's national Antarctic program in Christchurch.

The Antarctic Campus is also home to the [New Zealand Antarctic Heritage Trust](#) and the [International Antarctic Centre](#).

(29. Reproduced from Christchurch City Council: Christchurch's Antarctic Gateway status, relationships and history (<http://www.ccc.govt.nz/thecouncil/sistercities/antarcticrelations.aspx>))

# Tourism



## Heritage Expeditions

[Heritage Expeditions](#) is a local, family owned business formed in 1985 by biologist Rodney Russ. Heritage Expeditions began as a way to create ‘wilderness ambassadors’ who would advocate and support conservation efforts.

Heritage Expeditions operates its own Polar Research Vessel, *Spirit of Enderby*, on expeditions to Antarctica and the Subantarctic, departing from [Lyttelton](#).

Heritage Expeditions is a leader in developing sustainable and best-practice tourism policies, supports numerous conservation funds, and is a member of a number of conservation organisations and partnering with the Enderby Trust to provide scholarships for young people to join the expeditions<sup>(30)</sup>.

# The Erebus Disaster

On the morning of 28 November 1979, Air New Zealand Flight TE901 left Mangere airport, Auckland, for an 11-hour return sightseeing flight to Antarctica.

A navigational coordinate in the flight plan was changed in the early hours of 28 November at the briefing. The airline's navigation section believed it was making a minor adjustment to the flight's destination point, but a typing error some 14 months earlier meant it had actually shifted this point some 27 nautical miles to the east.

Instead of the IFR route taking Flight TE901 over flat sea ice, as Captain Jim Collins and First Officer Greg Cassin had been briefed, it would take them directly over Mt Erebus, a 3794-metre-high active volcano.



At 12.49 p.m. (NZST), the aircraft crashed into the lower slopes of Mt Erebus killing all 237 passengers and 20 crew on board, among them Peter Mulgrew, a member of the [Trans-Antarctic Expedition](#) in 1957-58, who acted as a guide on the flight.

It was the worst civil disaster in New Zealand's history.

View the first film of the Erebus disaster [here](#).

Search and rescue aircraft in Antarctica were activated but wreckage wasn't sighted on the lower slopes of Mt Erebus until midnight (NZST).

Final confirmation that there were no survivors came later the next day.

Professionals and volunteers from Antarctica and New Zealand took part in difficult and often harrowing investigative, recovery and identification operations.

Debate raged over who was at fault for the accident. The chief inspector of air accidents attributed the disaster to pilot error. Justice Peter Mahon's Royal Commission of Inquiry disagreed, placing the blame on Air New Zealand and its systems. The controversy continues.

The Erebus disaster has been remembered in many ways. Memorial services for the victims were held in the immediate aftermath of the crash, and have continued, notably on significant anniversaries<sup>(31)</sup>.



Cross on Mt Erebus  
[nzhistory.net.nz](http://nzhistory.net.nz)

(31. Reproduced from 'Erebus Disaster' New Zealand History (<http://www.nzhistory.net.nz/culture/erebus-disaster>))



# Antarctic Connections - Christchurch

## [Canterbury Museum](#)

Rolleston Ave ([Location A](#))



Canterbury Museum holds an internationally renowned collection of Antarctic artefacts which began with donations by [Scott](#), [Amundsen](#) and [Shackleton](#).

From the journeys of Antarctic discovery by [Captain James Cook](#) through the 'heroic' explorations of Scott, Shackleton and Amundsen, the expeditions of [Sir Edmund Hilary](#) and Sir Vivian Fuchs, the museum shares the stories and artefacts of Antarctic endeavour, tragedy and adventure spanning more than 100 years.

In 1958 the [Commonwealth Trans Antarctic Expedition](#), led by Vivian Fuchs, with Edmund Hillary, achieved Shackleton's goal of crossing the Antarctic continent. Hillary's tractor and Fuchs' Sno-cat are on display at the Canterbury Museum.

The R. H Stewart Hall of Antarctic Discovery (known as the Antarctic Hall) opened in 1977 and illustrates the whaling and sealing ventures of the 1800's, the rich heroic era and contemporary expeditions through hundreds of objects, personal stories, film and documents. Opened by His Royal Highness, The Duke of Edinburgh, the hall houses a permanent exhibition dedicated to providing a "historical background to Antarctica" and the "Museum's long involvement with the Antarctic".

Many artefacts were donated by members (or family members) of the original expeditions as a gesture of appreciation. Curator, [Baden Norris](#) notes Sir Peter Scott, son of Captain Robert Falcon Scott, was a "great supporter of the whole principle". In an interview with the Christchurch Press, 02 February 1971 Sir Peter states

*"I am sure that when completed the Antarctic Museum Centre will be of enormous credit to New Zealand".*

Sir Peter went on to donate a number of his father's personal items such as his polar medal and his Royal Navy Dress Uniform: Hat, Epulettes, Dress Sword and Sword Belt.



**Scott's Polar Medal**

© Canterbury Museum

[RETURN TO CONTENTS PAGE](#)

# Antarctic Connections - Christchurch

## 1 Park Terrace

Central City ([Location B](#))

Kathleen Scott and Oriana Wilson stayed at a house on this site in 1913 and wrote a letter to The Press newspaper expressing their gratitude for the sympathy and help given to them after they learned of the deaths of their husbands, [Robert Falcon Scott](#) and [Edward Wilson](#), as they returned from the South Pole<sup>(32)</sup>.

## Cook's Statue

Victoria Square, Corner of Armagh and Colombo Streets ([Location C](#))

Leaving New Zealand in November 1773, Cook's second voyage, in *Resolution*, reached 71° 10' S on 30 January 1774, the first ship to cross the Antarctic Circle, further south than any ship had ever sailed. Pack ice blocked progress and Cook turned north, but he returned again and again to New Zealand which he regarded as a haven. This statue records his visit.

## Christchurch Cathedral

Cathedral Square, Central City ([Location D](#))

Antarcticans have worshipped in the Cathedral since 1901 when Scott's *Discovery* expedition sailed south. The annual 'South to Antarctica Service', At the opening of the Antarctic Season, was held in conjunction with Antarctica New Zealand and the United States Antarctic Program. The Erebus Chalice which has been housed in the Cathedral over the winter is returned to the [Chapel of the Snows](#) at McMurdo Station for the summer<sup>(33)</sup>.

Since the 2011 earthquakes, services now take place in the Transitional Cathedral.



Christchurch Anglican Cathedral  
© James Stone, 2015

## Canterbury Club

Corner of Worcester Boulevard and Durham St, Central City ([Location F](#))



The club, established in 1872, welcomed Officers and scientists as guests, including Dr Edward Wilson and Robert Falcon Scott, who visited frequently from *Discovery* and *Terra Nova*. [Ernest Shackleton](#) held his last dinner here before leaving for Antarctica. on *Nimrod* in 1907<sup>(34)</sup>. Memorabilia from Shackleton's visit is framed in the bar of the Club, including a menu signed by Ernest himself.

(32/33/34. Reproduced from 'Antarctic Trail'  
([www.christchurch.net.nz/antarctic/](http://www.christchurch.net.nz/antarctic/))

# Antarctic Connections - Christchurch

## [Christchurch Art Gallery](#) – Te Puna o Waiwhetu

([Location G](#)) Currently exhibiting offsite at 209 Tuam St.

Christchurch Art Gallery Te Puna O Waiwhetu exhibits works from the *Artists in Antarctica* programme which involves artists spending up to three weeks at [Scott Base](#).

## [Christchurch Botanic Gardens](#) – Magnetic Observatory

([Location H](#))

Located behind the Canterbury Museum, the Christchurch Botanic Gardens has a Magnetic Observatory established in 1901 to assist [Robert Falcon Scott](#) with his magnetic surveys in Antarctica and to assist in locating the South Magnetic Pole. It is one of only three in the southern hemisphere.



The Observatory assisted all Antarctic explorers of the heroic era in locating the South Magnetic Pole and were used by scientists [Armitage, Barne, Bernacchi, Simpson, Wright and Pennell] to calibrate their instruments before heading to the Antarctic. The observatory operated until 1969.

The earliest magnetic measurements in New Zealand were made at Ship Cove, Marlborough Sounds, during [Captain James Cook's](#) first visit in 1770. In 1901 continuous measurements started at the Magnetic Observatory located in the Botanic Gardens, and one of the original buildings still survives situated next to the weather station garden.



Christchurch Magnetic Observatory  
© James Stone, 2015

The observatory was shifted to Amberley, 50 kilometres north of Christchurch, in 1928 because of interference from the DC supply to the electric trams. In 1978 it was relocated at the current Eyrewell site, because of increasing development at Amberley.

New Zealand has been responsible for continuous magnetic measurements at [Scott Base](#) in the Antarctic, since the base was built during the 1957–58 International Geophysical Year. Both the Eyrewell and Scott Base stations (and a station at Apia in Samoa, now operated by the Samoan government) provide near real-time magnetic data to International Data Centres as part of the global magnetic observatory network INTERMAGNET<sup>(35)</sup>.

Today, plants from the sub-Antarctic may also be seen in the gardens, and those returning from the Ice often stop first at the Gardens to savour much missed smells and greenery.

(35. Reproduced from 'The Encyclopaedia of New Zealand'  
(<http://www.teara.govt.nz/en/magnetic-field/page-1>)

# Antarctic Connections - Christchurch

## University of Canterbury<sup>(36)</sup>:

Ilam Road, Ilam ([Locations M & N](#))

Home of the McMillan Brown Library, Gateway Antarctica research centre and COMNAP, the Council of Managers of National Antarctic Programs.

The University's Antarctic links began when Scott's cousin Robert Julian Scott, a lecturer there, convinced Scott to sail from [Lyttelton](#) instead of Melbourne. Some 30 University staff have experience in Antarctic and Southern Ocean research.

## Macmillan Brown Library

The McMillan Brown Library holds archives of both Antarctic and New Zealand's sub-Antarctic island collections which document original research, along with the *Lyttelton Times* archives that record port visits and events relating to Antarctica. The University's central library is also home to an Antarctic Collection.

## [Gateway Antarctica](#)



Gateway Antarctica is the centre for Antarctic studies and research at the University of Canterbury established 1 January 1999. Gateway Antarctica plays a leading role in the quest for knowledge in a diverse range of national and international Antarctic research projects. This includes areas such as engineering in extreme environments, Antarctica as driver of (and responder to) climate change,

connections between Antarctica and New Zealand, and human influences in and on Antarctica. It offers opportunities in Antarctic studies, including time on the Ice, and many public lectures.

## [The Council of Managers of National Antarctic Programs \(COMNAP\)](#)

COMNAP is an international association of 29 national Antarctic programmes which brings together the national officials responsible for planning, conducting and managing Antarctic science on behalf of their respective governments.

COMNAP's purpose is to develop and promote best practice in managing the support of Antarctic research. COMNAP was established in September 1988 and the Secretariat has been located in Christchurch since 2009 at the University of Canterbury. National Antarctic Programs are those organizations that have responsibility for delivering and supporting scientific research in the Antarctic Treaty Area on behalf of their respective governments and in the spirit of the Antarctic Treaty. COMNAP's purpose is to



*"Develop and promote best practice in managing the support of scientific research in Antarctica".*

(36. Modified from 'Antarctic Trail' ([www.christchurch.net.nz/antarctic/](http://www.christchurch.net.nz/antarctic/)) and Christchurch City Council Antarctic Relations (<http://www.ccc.govt.nz/thecouncil/sistercities/antarcticrelations.aspx>)

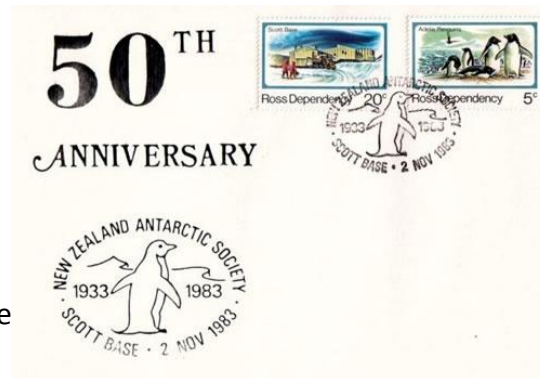


# Antarctic Connections - Christchurch

## Ross Sea Dependency Post Office

Bush Inn Centre, Corner Riccarton and Waimairi Roads  
([Location O](#))

Ross Dependency stamps and franking are supplied by the Real Aoteroa shop, part of the Riccarton Post Shop at the Bush Inn Centre; they are the philatelic bureau for Christchurch and the Ross Dependency Agency (all the mail from the Ross Sea area comes through here for franking)<sup>(37)</sup>.



## Middleton Grange School - Bowen Homestead

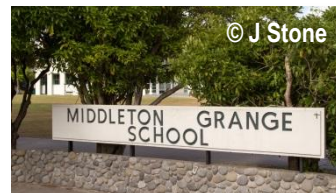
50 Acacia Avenue, Upper Riccarton ([Location P](#))

**Middleton Grange** was owned by Sir Charles Bowen (1830-1917), a Christchurch City Council Member. He married Georgina Markham, the daughter of Sir Clements Markham, president of the Royal Geographical Society, ardent supporter of Britain's race to the South Pole, and with whom Bowen had crossed the Andes in 1860. They hosted [Scott](#), [Shackleton](#) and [Wilson](#) at their homestead, and Scott went on to use Middleton Grange as his New Zealand headquarters.

Their daughter, Gertrude, married Professor Robert Julian Scott, a cousin of Robert Falcon Scott.

Bowen was well known for his enthusiasm towards Antarctic exploration and was the first man on board *Discovery* when she reached [Lyttelton](#).

Today the Bowen homestead houses the primary school library for Middleton Grange School, the tradition of the link to Antarctic explorers is kept alive in the [names of the school houses](#) – Bowen, Scott, Wilson and Shackleton.



## Te Koraha - Rangī Ruru Girls' School

59 Hewitts Road, Merivale ([Location R](#))

Built in 1884, this elegant tudoresque homestead was the home of Arthur Edgar Gravenor Rhodes (1859-1922), Mayor of Christchurch from 1901-1902.

Te Koraha means 'wilderness' in Māori, and refers to the native trees Rhodes planted around the house.



Robert Falcon Scott stayed at Te Koraha, before the *Discovery* departed. Te Koraha now forms the central staffroom and offices of [Rangī Ruru Girl's School](#).

(37. Reproduced from Christchurch City Council Antarctic Relations  
(<http://www.ccc.govt.nz/thecouncil/sistercities/antarcticrelations.aspx>)

# Antarctic Connections - Christchurch

## Shackleton's Oak

90 Ensors Road, Waltham ([Location S](#))

An oak tree planted by [Ernest Shackleton](#) in 1917 at the Christchurch Girls' Training Hostel following the rescue of the Ross Sea Party, 90 Ensors Road now hosts CPIT, the Christchurch Polytechnic Institute of Technology.



## [Christchurch International Airport](#)

Memorial Avenue, Harewood ([Location K](#))

Christchurch is the aerial gateway to the Antarctic with over 100 direct flights each year. Since the 1950s when Antarctic scientific expeditions began, the United States Air Force, Air National Guard and the Royal New Zealand Air Force have been stationed in Christchurch as part of **Operation Deep Freeze**.

For visitors who fly into Christchurch the link with Antarctica is obvious, as planes taxi in amongst the specialist aircraft that use the airport as a base for flights to the ice. During the Antarctic flying season - generally from August to February - large ski-equipped LC-130 Hercules and other specialist aircraft (C-17 Globemasters) can be seen on the Antarctic Apron north of the main passenger terminals, loading freight and personnel for the flight to McMurdo Sound.



Operation Deep Freeze aircraft on the ice in Antarctica

[www.af.mil](http://www.af.mil)

Every summer military aircraft from the USA and Italy complete some 100 flights to the continent and move over 5,500 passengers and 1,400 tonnes of cargo. Over 75% of the world's scientists flying to Antarctica depart from Christchurch.

The US McMurdo Station and New Zealand's [Scott Base](#) are approximately 3,920km by air from Christchurch<sup>(38)</sup>.

(38. Reproduced from Christchurch City Council Antarctic Relations  
(<http://www.ccc.govt.nz/thecouncil/sistercities/antarcticrelations.aspx>)

# Antarctic Connections - Christchurch

## [International Antarctic Centre](#)

38 Orchard Road, Christchurch Airport ([Location J](#))



One of NZ's best tourist attractions, the International Antarctic Centre provides visitors of all ages with an interactive, fun and exciting experience of Antarctica.

Experience the dramatic seasonal lighting in the four seasons of Antarctica show where it snows every 6 minutes. Venture out onto "the ice" from [Scott Base](#) to play in "Antarctica" the snow and ice experience and survive an Antarctic storm! Hang out with Little Blue Penguins, buckle up for the famously exciting Håglund ride, take an awesome simulated 4D Antarctic cruise, then watch a stunning movie on a MASSIVE screen! It's the closest you'll get to Antarctica without mounting your own expedition!<sup>(39)</sup>

View trailers for the International Antarctic Centre [here](#).



(39. Reproduced from NZ Icefest (<http://nzicefest.co.nz/antarctic-partners>))

# Antarctic Connections - Christchurch

## Indian Totem Pole

Orchard Road, Harewood ([Location L](#))

An Indian totem pole of friendship was gifted to Canterbury by the Oregon Centennial Commission and Portland Zoological Society in appreciation of the hospitality given to [Operation Deep Freeze](#) personnel. It was carved by Chief Lelooska of Oregon in 1959.



## [Air Force Museum of New Zealand](#)

45 Harvard Avenue, Main South Road ([Location Q](#))



This museum brings together a collection of historic aircraft, including original Beaver and Auster aircraft used in Antarctic aviation along with a display of the original aircraft (WE563) used during the 1955 –1959 NZ [Trans Antarctic Expedition](#).

## Wigram Airport

The first flights to Antarctica left from New Zealand on 20 December 1955. They were undertaken by a US Navy air squadron, as part of [Operation Deep Freeze](#) <sup>(40)</sup>.

(40. Reproduced from New Zealand History 'First flights to Antarctica'  
(<http://www.nzhistory.net.nz/media/interactive/antarctica-aeroplane/>)



# Antarctic Connections - Christchurch

## Ferrymead Heritage Park

50 Ferrymead Park Drive, Ferrymead ([Location U](#))

Ferrymead Heritage Park houses photographer [Herbert Ponting's](#) darkroom, and a US Antarctic Program DC3 aeroplane used for US supply missions to and within Antarctica during the 1960s.

A R4D5 is currently being renovated.

A Douglas LC47H BuNo17221 is also on display, this aircraft was not used on the initial flights south but served in Antarctica from 1963 to 1966, with the US Navy Air Development Squadron Six [VX-6]. It was presented to the City of Christchurch to mark the role aircraft of its type played in the Antarctic, and to honour the hospitality the city's residents had shown to the staff of the United States Antarctic Research Program.



Joseph Kinsey (1852-1936)  
[nzhistory.net.nz/media/  
photo/joseph-kinsey](http://nzhistory.net.nz/media/photo/joseph-kinsey)

A cottage at Ferrymead Heritage Park was owned by Joseph Kinsey. Kinsey founded the shipping firm Kinsey and Co. and through this became involved in aspects of [Scott](#) and [Shackleton's](#) Antarctic expeditions, acting as their New Zealand agent. Both men visited Kinsey's properties in Papanui and Sumner.

Joseph Kinsey was also a keen amateur photographer and it is believed he lent his laboratory, situated in a cottage behind his Papanui house, to Scott's photographer, [Herbert Ponting](#) during which time Ponting made repairs to all his equipment damaged during the voyage from England<sup>(41)</sup>.

*"Opposite The Tenements, on the south side of the dining table, was a compartment occupied by Taylor, Debenham and Gran. Whilst we were in Christchurch, I had cast longing eyes on a curtain in Mr. Kinsey's laboratory, as likely to be useful in the South, and he had given it to me. Gran, seeing the curtain stowed away on one of my dark-room shelves, in turn fell in love with it, and begged it of me for their cubicle. I therefore leant it to them, and it was hung on a wire across the entrance to their abode whenever the occupants desired seclusion and freedom from the gaze of those in The Tenements opposite. Whereupon Oates, scorning privacy and such 'effeminate luxury', as he characterised this fitment, compared their cubicle to an 'opium den', 'a ladies boudoir', and various other things expressive of his contempt". – Herbert Ponting, 'Great White South'.*



Herbert Ponting in the hut's darkroom  
© Canterbury Museum

In 1971, his Papanui property was sold to make way for a block of motels. But three weeks before the site was due to be cleared the Christchurch Branch of the [New Zealand Antarctic Society](#) acquired the cottage, relocated it to Ferrymead Heritage Park and undertook restoration work<sup>(42)</sup>.

(41/42. Reproduced from New Zealand History 'Joseph Kinsey' (<http://www.nzhistory.net.nz/media/photo/joseph-kinsey>)

# Antarctic Connections - Christchurch

Kinsey received the Scott Medal from the Royal Geographical Society in 1914 and was knighted in 1917 for his work with Antarctic expeditions. He died in 1936 and bequeathed his collection of Antarctic material to the Alexander Turnbull Library.

## Bromley Cemetery

Corner of Keighleys Road and Linwood Avenue, Linwood ([Location T](#))

Located here are the graves of Father John Coleman [[Block 19, plot 349](#)] and Father Ronald O’Gorman [[Block 18, plot 296](#)], priests at the [Chapel of the Snows](#), Antarctica. Father Coleman’s grave has a Penguin on the gravestone to represent the 22 seasons he spent on the ice.

## Kaiapoi Pa

Preeces Road, off State Highway 1, just south of Waikuku ([Location Z](#))

[Dr Edward Wilson](#) and members of the *Discovery* expedition visited [Kaiapoi Pa](#) where Maori performed the Haka then danced and sang for them.

## Waimairi Beach, New Brighton

([Location Y](#))

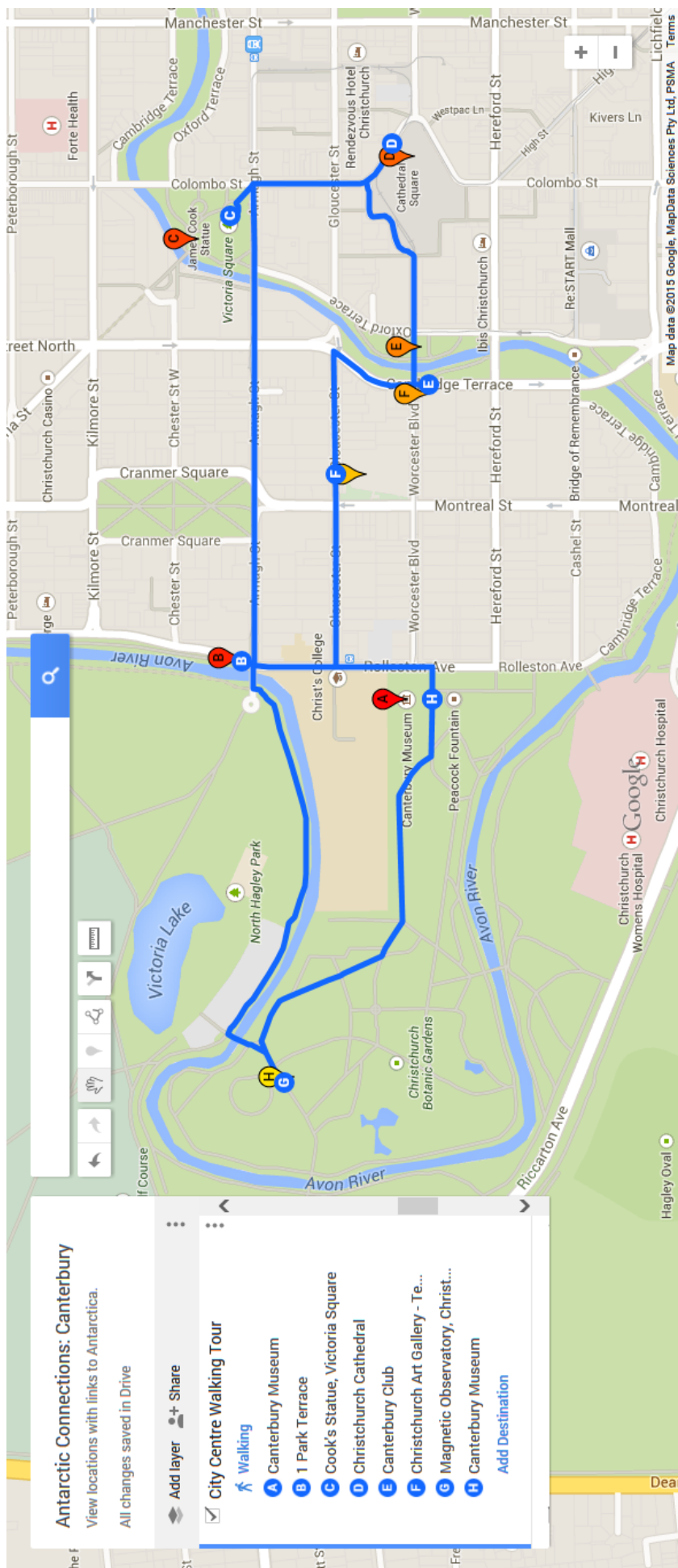
Sled dogs of the heroic era expeditions trained on the beaches here.

Dogs were also used by the New Zealand party of the Trans-Antarctic Expedition and dog teams were subsequently kept at [Scott Base](#). By the 1970s the role of dogs had decreased, and in February 1986 the last ‘New Zealand’ dogs returned from Scott Base.

Five years later concern over the impact of dogs on native wildlife in the Antarctic led to a new clause in the Antarctic treaty: ‘

*Dogs shall not be introduced onto land or ice shelves and dogs currently in those areas shall be removed by April 1994.’*

The last dogs were removed from Antarctica on 22 February 1994<sup>(43)</sup>.



## [City Centre Walking Tour Map](#)

Distance = 3.6km

# Antarctic Connections - Lyttelton

Since 1901 through to the present day, Antarctic expeditions use Lyttelton's port services, churches, pubs and historic dry dock.

[Scott](#) and [Shackleton](#) both chose the Port of Lyttelton as the New Zealand base for their *Discovery*, *Nimrod* and *Terra Nova* Expeditions.

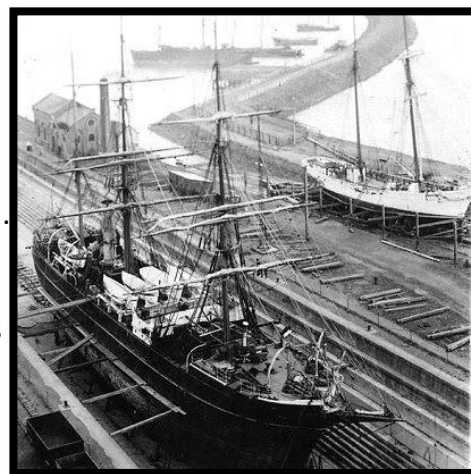
Scott was reportedly given the choice between Melbourne and Christchurch as the base for his first expedition - each of which had a [magnetic observatory](#). He may have chosen Christchurch simply because it was closer to the Antarctic, but the presence of his cousin, R.J. Scott, a Professor of Engineering at the University of Canterbury, may also have had an influence. Generous offers of goods and services were made by both the Harbour Board and local businesses.

## 1901-04: Scott's *Discovery* expedition

British explorer Robert Falcon Scott lead the British National Antarctic Expedition, or *Discovery* expedition. This was the first real land expedition in the Antarctic, and aimed to carry out extensive scientific research and geographical exploration. Scott used Lyttelton as his New Zealand port, and received great support from the New Zealanders, one of whom, Clarence Hare, was taken on as a steward. With bands playing and crowds lining the wharves *Discovery* departed for Antarctica on the 21st of December 1901<sup>(44)</sup>.

### Death at the port

Charles Bonner, a high spirited twenty three year old seaman climbed the main mast above the crow's nest where he sat on the masthead waving to the crowds. Attempting to stand, he slipped and fell to his death. Bonner was buried when *Discovery* called at Port Chalmers, two days later.



**Robert Falcon Scott's RSS *Discovery* in Lyttelton Graving Dock , December 1901.**

Arriving at the port on the 29th November, she was initially berthed at Gladstone Pier, later moving to the No. 2 (Ferry) Wharf.

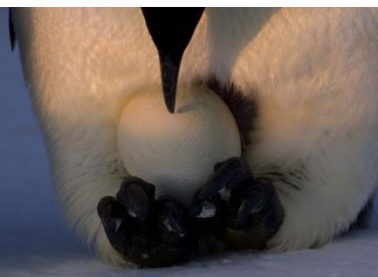
[canterburyheritage.blogspot.co.nz](http://canterburyheritage.blogspot.co.nz)

### Of Penguin Eggs

The first man to find an emperor penguin egg – Lance Corporal A.H. Blissitt served on *Discovery*. Scott wrote in his diary on Jan 28

*"All the news seems good, Blissitt has discovered an Emperor Penguin's egg and his mess mates expect him to be knighted".*

Emperor penguin eggs went on to become a valuable commodity, with each one being worth over £80 back in the UK by the time of Shackleton's departure on *Nimrod*.



**Emperor Penguin Egg**  
[antarctica.gov.au](http://antarctica.gov.au)

Local Lyttelton men on the crew of the relief ship *Morning* included Arthur Beaumont and John B. Partridge. Partridge also joined Shackleton's *Nimrod* expedition, along with Thomas Myrick.

(44. Modified from New Zealand History 'NZ Ports and Antarctica'  
(<http://www.nzhistory.net.nz/media/photo/captain-scotts-ships-lyttelton>)





***Morning, Discovery and Terra Nova returned to the Port of Lyttelton following the British Antarctic Expedition, 1904.***



**Devonia Cottage**  
© Clive Phillips, 2015.

Shackleton was a member of Scott's *Discovery* Expedition, and on returning to Lyttelton, he was entertained by the daughters of Captain Hatchwell in their home at **Devonia Cottage**, 10a Bridle Path Road ([Location f](#)).

An account of which can be read [here](#).

Captain Robert Hatchwell was a Master Mariner, and ran a school for navigation for officers and cadets of the Navy from his family home 'Devonia'; his daughters made use of the panoramic views of Lyttelton's harbour by teaching signalling.

## **1907-08: Shackleton's *Nimrod* Expedition**

The hospitality extended to Shackleton during his stay in Christchurch during Scott's *Discovery* Expedition drew him to return to Lyttelton for his departure on his own *Nimrod* Expedition in 1907.

*Nimrod* arrived into Lyttelton under the command of Captain England on 23 November 1907 from England via St. Vincent and Capetown. An account in the *Otago Witness* (dated 27/11/1907) of *Nimrod's* arrival can be read [here](#).

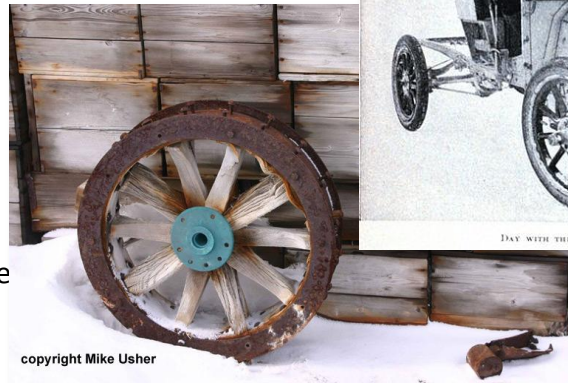
It details the vessel, the motives of the expedition, the crew and life at sea.

*"The Nimrod has a tremendous motion, but she is a good sea boat".*

The article describes the scientific work carried out on the voyage including specimen collection along with magnetic and hydrographical survey measurements.

*"This expedition must not be accepted purely as a dash for the Pole, that of course, is one of the objects, but the work is also to cover scientific exploration of a comprehensive character. We hope the conquest of the Pole will include part of the success, but not all of it. Mr Shackleton is to lead the south-going party".*

It also outlines Shackleton's plans to use a motor car in Antarctica for the first time. The spare wheel from the Arrol-Johnston motor car brought to the Antarctic in 1907 by Shackleton is on display at the [Canterbury Museum](#). Further information about the car can be found [here](#).



Other interesting details from the article include plans to receive 12 Esquimoux dogs from Stewart Island, along with sheep, fodder and other provisions sourced locally from Canterbury; and the concerns of Scurvy and melancholia during the *"long and seemingly interminable winter"*.

Huge crowds, exceeding 50000 people, lined the streets and harbour shores for the departure of *Nimrod*, such was the interest in Antarctic exploration at the time. Free trains were laid on for the people of Christchurch.



Footage of *Nimrod* leaving Lyttelton harbour can be seen at the [Thornycroft Torpedo Boat Museum](#) at Magazine Bay, housed in the category 1 powder magazine building (1874) ([Location h](#)). The museum primarily exhibits the remains of Thornycroft Torpedo Boat No. 168.

Alternatively the footage can be viewed [here](#).

## Steam Tug Lyttelton

*Lyttelton* - is a twin screw steam tug that was in service from 1907 to 1970. She escorted both *Nimrod* and *Terra Nova* at the start of their voyages south (as *Tug Canterbury*).

The '[Tug Lyttelton Preservation Society](#)' maintains the vessel and arranges trips around the harbour every Sunday afternoon during summer ([Location b](#)).



Tug Canterbury (later Lyttelton) and Ernest Shackleton's ship *Nimrod*, 1 January 1908.



Steam Tug Lyttelton today, with the Chinese Icebreaker Xue Long behind, January 2015

© James Stone

## The Koonya

The *Koonya* was a Union Steamship Company collier, she towed *Nimrod* South to just short of the Antarctic Circle, to save her coal for battling the pack ice and the return journey home.

## 1910-13: Scott's *Terra Nova* Expedition

Scott returned to New Zealand for his second Antarctic expedition, the *Terra Nova* Expedition for the 'race' to the South Pole. Again, Lyttelton was to be the departure port for the expedition.



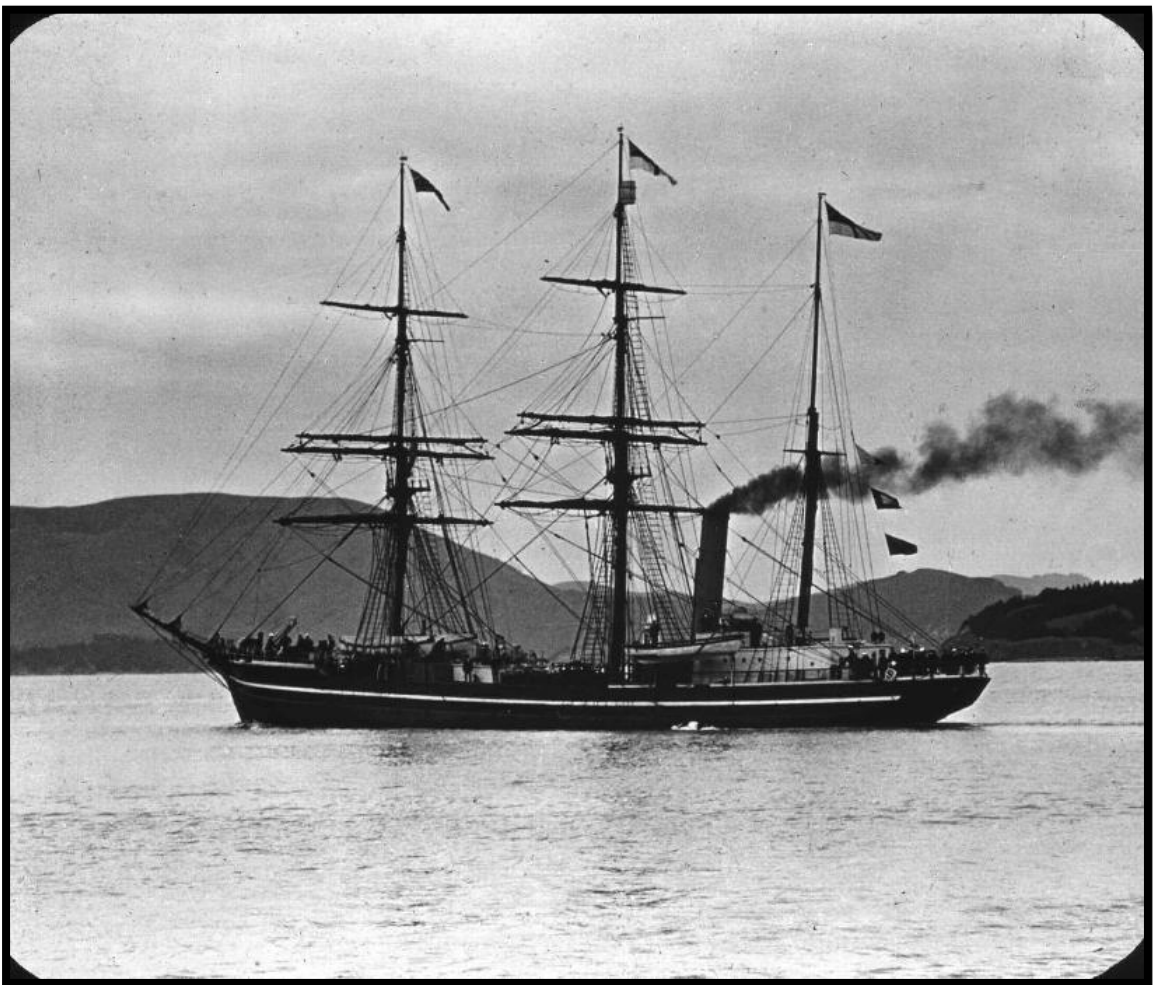


Sledging in Winchester St, Lyttelton, prior to the departure of the *Terra Nova* on its second voyage, 1910.

Crew onboard *Terra Nova*  
[nzhistory.net.nz](http://nzhistory.net.nz)



The *Terra Nova* officially leaves from Lyttelton on November 26 1910, and returns there during the expedition. Scott chose not to leave from Lyttelton onboard the *Terra Nova*, but travelled by rail to Port Chalmers the following day and joined the ship there.



*Terra Nova*  
 © Canterbury Museum



## A Strong Antarctic Connection

Such was Lyttelton's involvement with Antarctic expeditions at this time, that a report in the *Lyttelton Times* in 1910 commented that:

*"Lyttelton would take some of the credit to itself if the Union Jack flew over the South Pole".*

Local man Mortimer McCarthy voyaged on *Terra Nova*, and Charles Williams made three voyages on the *Terra Nova* 1910/'11/'12.

*Terra Nova* was welcomed back from Antarctica on 31 March 1911 with

*"shrieks and screams from every horn, whistle and siren in port".*

She brought news of [Amundsen's Fram](#) in the Bay of Whales, and when she returned South a year later, her crew learnt the Norwegians had reached the Pole.

The majority of the expedition members also disembarked at Lyttelton after the polar party's tragedy., and when *Terra Nova* left Lyttelton for England in 1913, the *Lyttelton Times* declared :

*"A notable chapter in Canterbury history was closed".*

James 'Scotty' Paton was a Lyttelton resident who made 9 Antarctic voyages, two on *Morning*, 1902-04, two on *Nimrod* 1907-09, three on *Terra Nova* 1910-13 and two on *Aurora* 1914-17. He lost his life when *Aurora* disappeared on a voyage to Chile in 1917. Some of 'Scotty's' letters home are on display in the [Canterbury Museum](#).



Letter from James Paton  
to Mr and Mrs Smith  
© Canterbury museum

Other crew members of the Heroic Age expeditions settled in Lyttelton: including W M McDonald, J R Denistoun, Thomas Clissold, William Burton and [Dimitri Gerof](#).

In 1955, Admiral Richard E. Byrd assembled 7 ships in Lyttelton to support his fifth and last expedition to Antarctica. He left on 10 December aboard *USS Glacier*, with six other vessels spread out across the Southern Ocean between Lyttelton and McMurdo to act as weather stations and rescue vessels for the first flight to Antarctica.

Other vessels (including *Wyandot*, *Greenville*, *Victory* and the icebreaker *Eastwind*) shipped materials, men, scientific equipment and small planes to Antarctica to aid in construction of Hallett Station, [Scott Base](#) and McMurdo Station. Several Lytteltonians served in Antarctica during the [International Geophysical Year](#) (IGY) of 1957-59.

Gillian Wratt, the first CEO of [Antarctica NZ](#) lived in Lyttelton.

## Around the Port

### Lyttelton Port Company

The [Lyttelton Port Company](#) continues to host icebreakers, Antarctic scientific and supply vessels bound for and returning from the Antarctic. The Graving Dock used by *Discovery*, *Morning*, *Nimrod* and *Terra* is still in operation today. Recent ships to visit include *Araon* (South Korea), *Nathaniel B Palmer* (US), *Italica* (Italy), *Xue Long* (China) *Janas* (NZ) and *Kapitan Klevnikov* (Russia).

### Wharves

**No. 1 Breast Work**, inner harbour – where *Nimrod* and *Terra Nova* departed, and where *Discovery*, *Morning* and *Terra Nova* returned on 1 April 1904.

**No. 2 (Ferry) Wharf** – now home to the Quail Island Ferry and Steam Tug *Lyttelton*.

**No. 4 Jetty** – where *Discovery* departed for the Antarctic 21 December 1901.

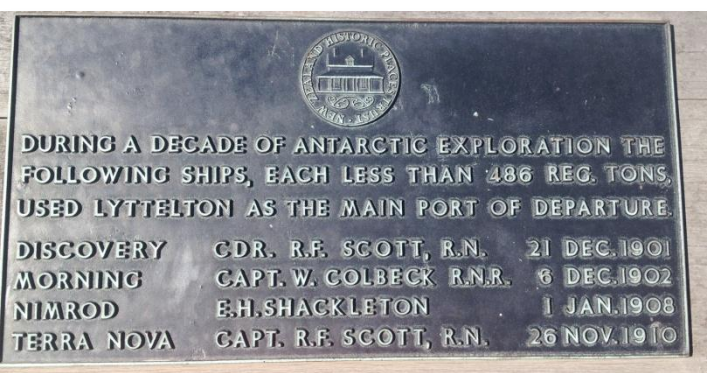
**Graving Dock** – used by most expedition ships at various times; it is a remarkable feat of Victorian engineering that took 600man years to build, being conceived in 1875 and completed in 1882 ([Location g](#)).

**Norwich Quay** – site of Joseph Kinsey's shipping office.

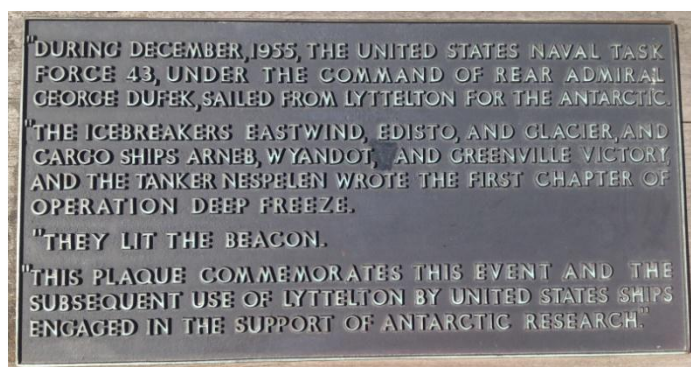
**Quail Island Jetty** – used to land dogs, ponies and mules for quarantine.

### Plaques

Two plaques commemorating the early Antarctic expeditions and the US Operation Deep Freeze ships engaged in Antarctic research are located near the Diamond Harbour Ferry office on the walkway down to Wharf No. 2 ([Location i](#)).



© James Stone, 2015



### Lyttelton Museum

Currently closed because the building was demolished after the Canterbury earthquakes. Pop-up exhibitions and plans for a new museum.

<http://www.lytteltonmuseum.co.nz/>



### Mole and Scott's Pile

Navigational aids for entering and exiting the harbour, Scotts Pile marks one nautical mile from the harbour mole, he used it to calibrate the ships' log.

### Naval Point

Scott's 1911 hut was built here prior to transportation to Antarctica.

[RETURN TO CONTENTS PAGE](#)

## Around the Town

### St. Saviour's Anglican Church

17 Winchester St ([Location c](#))

Originally in Lyttelton this church was attended by early Antarctic expedition members including Scott and his crews from both the *Discovery* and *Terra Nova* expeditions.

On 16 February 1913 Reverend Chambers led a memorial service to Scott and his companions saying they

*“had displayed magnificent courage and splendid devotion to duty”*<sup>(45)</sup>.



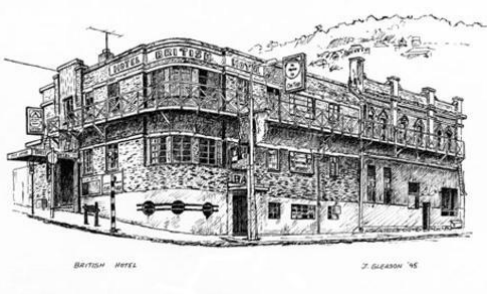
St. Saviours Church, Lyttelton,  
January 2015.  
© James Stone



Chapel of the Snows, McMurdo  
© James Stone, 2015

Relocated into Christchurch in 1976, its original altar was moved in to the **Chapel of the Snows**, McMurdo Station, Antarctica.

The Church was returned home to Lyttelton in 2013 and now sits on the site of the Holy Trinity Church, destroyed in the 2011 earthquakes.



### British Hotel & Mitre Tavern

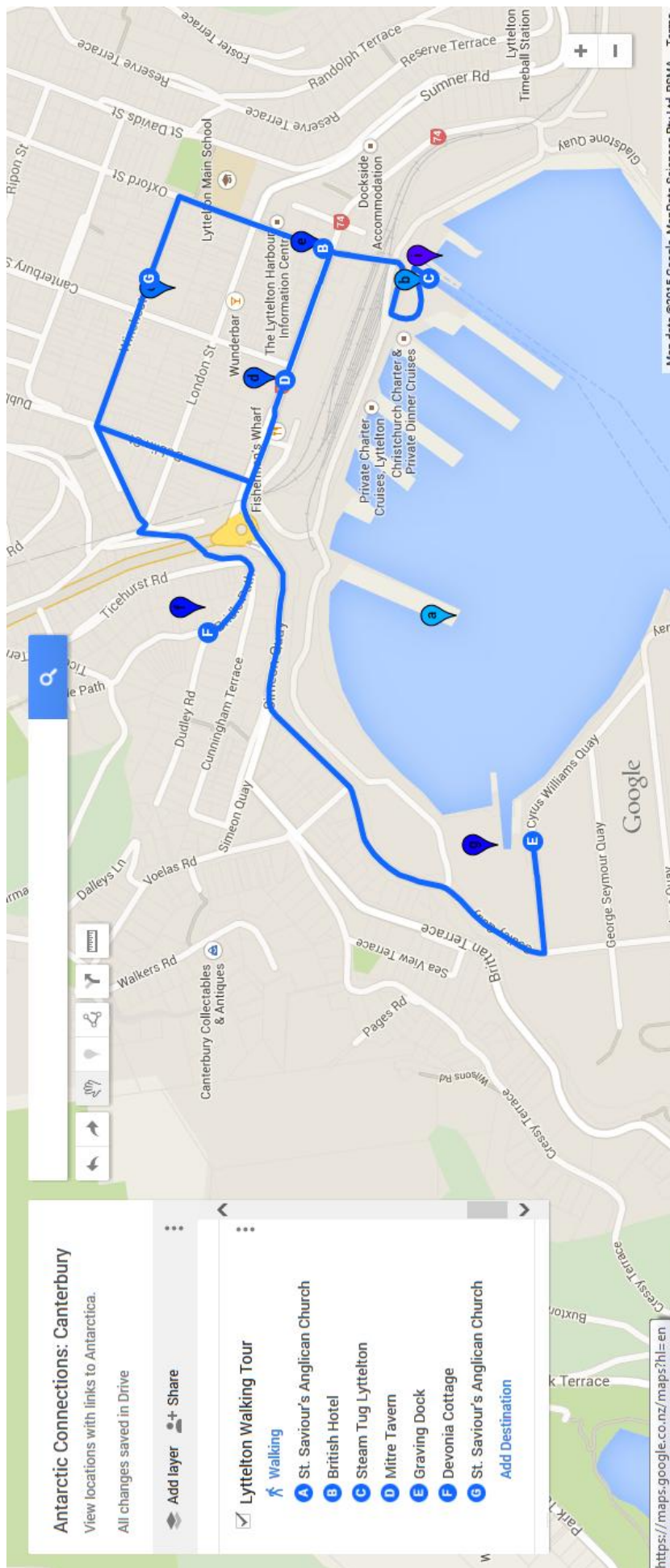
The British Hotel ([Location e](#)) was chosen for Scott's farewell dinner for the *Discovery* Expedition in 1901, and the Mitre ([Location d](#)) for the *Terra Nova* Expedition in 1912. The *Lyttelton Times* reports a fracas between the modern Mrs Scott and the more traditional Mrs Evans in the presence of Mrs Wilson.

Since the heroic era, Lyttelton remains a popular watering hole for visiting Antarcticans.

### Sled dog statue

A statue of a sled dog is planned for Lyttelton, on London Street, overlooking Quail Island. The dog embodies the courage, tenacity and comradeship of all who travel to the southern ocean and Antarctica and celebrates 250 years of Lyttelton's association with the Antarctic.





## Lyttelton Walking Tour Map

Distance = 4.8km



## Quail Island

Lyttelton Harbour ([Location i](#))

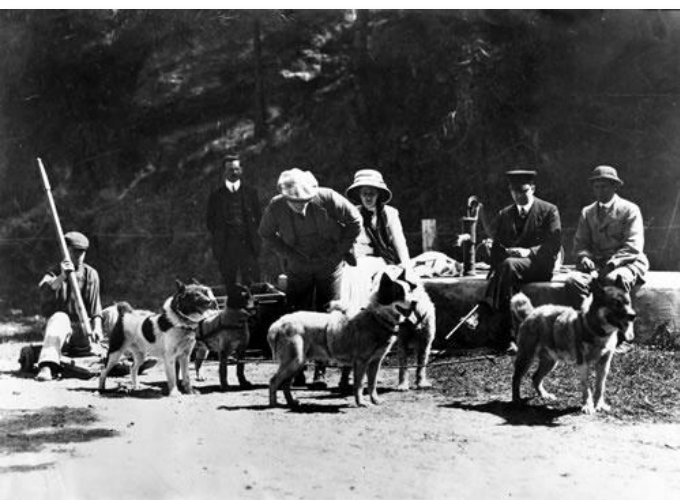
Quail Island or 'Ötamahua' lies approximately 3km from the port of Lyttelton in Te Whakaraupö (Bay of Raupö).

When Antarctic exploration was at its peak in 1901–1929, the island was used to quarantine and train dogs and ponies, including for both Scott and Shackleton's expeditions.

Ferries to Quail Island are operated by [Black Cat Cruises](#) from Wharf No. 2, Lyttelton ([Location i](#)).

A replica sled dog kennel is located on the island, along with the original kennel foundations, the old wharf where the dogs and ponies were loaded and unloaded prior to their journey south, and the beach where they exercised.

Quail Island also quarantined people, housing the only Leprosy colony in New Zealand.



Robert Falcon Scott and Mrs Scott inspecting the dogs on Quail Island, 1910 ([nzhistory.net.nz](http://nzhistory.net.nz)).

### Scott's *Discovery* expedition

Scott's *Discovery* expedition was the first to use Quail Island, with twenty-three Siberian dogs that had been purchased from the Russia. They stayed on the island in 1901 with their handler, William Weller. Although the dogs were reportedly '*in capital condition and apparently in good humour*' when they left Quail Island, they failed to perform in the Antarctic; - the expedition having no experienced dog drivers, the dogs were driven too hard in the harsh Antarctic environment, with insufficient breaks and an inadequate diet. Eventually they all died of exhaustion or were killed as feed for the remaining pack.

### Shackleton's *Nimrod* expedition

As a result of their experiences on the *Discovery* expedition, both Scott and Shackleton came to mistrust dogs, and after hearing of the good performance of Manchurian ponies, Shackleton decided to try them on his *Nimrod* expedition. Fifteen ponies from China stayed on Quail Island between November 1907 and January 1908. The ponies were broken in by a professional horse trainer, W.H. Tubman, and the biologist and surgeon for the expedition, Dr Forbes Mackay, who would be in charge of them on the ice.

Only 10 of the 15 eventually went south. Two were destroyed en route, and a further four had died by June 1908, the remainder by December. Yet despite these early losses, ponies made a marginal contribution to Shackleton reaching within 160 km of the Pole - and provided food for the team on their return journey.

Nine dogs (the descendants of dogs left on Stewart Island by Norwegian explorer Carsten Borchgrevink) and handler Ernest Joyce joined Shackleton's ponies on Quail Island in December 1907. All nine headed south and, although again no experienced dog drivers were included in the expedition, they (or their offspring) performed relatively well.

### **Scott's *Terra Nova* expedition**

Scott was convinced by Shackleton's success in nearly reaching the pole, and used similar means of transport on the *Terra Nova* expedition. Ponies from China, and 34 dogs (31 Siberian, two Eskimo (Greenland dogs) and one New Zealand collie) stayed at Quail Island between September and November 1910. They were trained by dog handler Cecil Meares, dog driver Dimitri Gerov, groom Anton Omelchenko and Captain Lawrence Oates.

Scott and his wife Kathleen, visited Quail Island in October 1910 to watch a display of ponies hauling sledges along the beach, and dogs hauling sledges from the jetty.

Only eight of the 19 ponies survived their first winter in the Antarctic and the remainder died by December 1911.

The dogs fared better, though it is unclear from accounts of the *Terra Nova* expedition how many survived.

Scott arranged for additional ponies and dogs to arrive in New Zealand while he and his party wintered in the Antarctic in case a second attempt at the Pole was needed. In September 1911 seven Himalayan mules donated by the Indian government arrived at Quail Island. They were later joined by 14 Siberian dogs. All the animals were cared for by a volunteer to the expedition, J.R. Dennistoun. The reinforcements arrived in the Antarctic in February 1912. But instead of a second attempt on the Pole they were used in the search party for Scott.



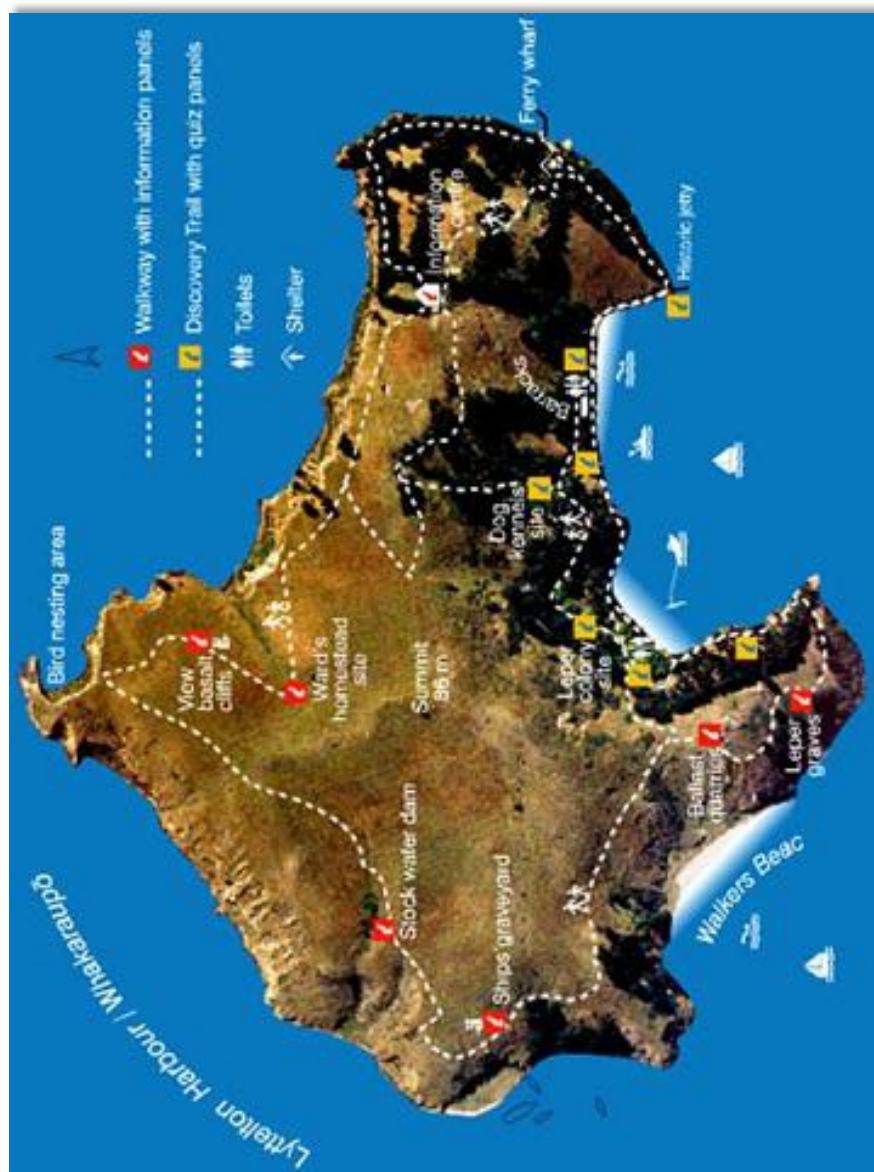
Robert Falcon Scott and John Grigg inspecting ponies on Quail Island, 1910; Captain Lawrence Oates is wearing the tweed hat ([nzhistory.net.nz](http://www.nzhistory.net.nz)).

### **Byrd's first expedition**

Byrd's first Antarctic Expedition marked the last use of Quail Island as a quarantine station, with 15 huskies quarantined on the island between March and July 1929. This followed protests from the Canterbury Sheepowners' Union, who feared the dogs might attack sheep.

Ninety huskies that had already headed south on Byrd's expedition had stayed on Quarantine Island, Port Chalmers. They and their handlers stayed on the island between October and December 1928. As the dogs were only to be 'rested' rather than quarantined they were put on ready display to the public; the first trip to see 'the Polar dogs' attracted 4000 visitors. Four dogs died while on the island. At least one other, the popular lead dog Chinook was lost in the Antarctic<sup>(46)</sup>.

(46. Reproduced from New Zealand History 'Quail Island' (<http://www.nzhistory.net.nz/media/photo/dogs-quail-island/>))



**Quail Island Map**

[doc.govt.nz](http://doc.govt.nz)

A brochure for information regarding a visit to Quail Island can be found [here](http://doc.govt.nz).



# Antarctic Connections

## Akaroa

Akaroa is a small harbour town on the Banks Peninsula approximately one and a half hours drive from Christchurch. Originally a French whaling station, Akaroa retains French connections Captain and Navigator was born here in 1872.



© James Stone, 2015

### Akaroa Museum Te Whare Taonga

71 Rue Lavaud ([Location l](#))

(Currently open but under repair, Frank Worsley exhibit not on display (Jan 2015))

When repairs are complete, the museum will house an exhibition titled 'Salute to Adventure' celebrating the astonishing life of Frank Worsley and giving a detailed account of his adventures.



© James Stone, 2015

### Worsley's Birthplace

44 Rue Balguerie ([Location m](#))

Frank Worsley's parents Henry Theophilus and Georgina Worsley were married in Christchurch and moved to Akaroa, settling on a small steep property high up the Grehan Valley. Their two oldest children were born here, Harry and Helen. Georgina gave birth to their youngest, Frank, on 22 Feb 1872 at 44 Rue Balguerie, a house in Akaroa which belonged to the Curry family. It is assumed that she moved to be closer to midwifery assistance in the township. The house stands on the corner of Watson St and Rue Balguerie.

### Worsley Bust

Britomart Reserve ([Location n](#))

In 2004, a bronze bust of Frank Worsley sculpted by Steven Gleeson was erected by the Friends of Akaroa Museum on the Britomart Reserve near the main wharf looking south in the direction of Wainui. The plinth is carved from Antarctic rocks.



© James Stone, 2015

### Akaroa Lighthouse

([Location o](#))

Steps opposite the lighthouse lead into the Anglican cemetery.

### Georgina Worsley's Grave

([Location p](#))

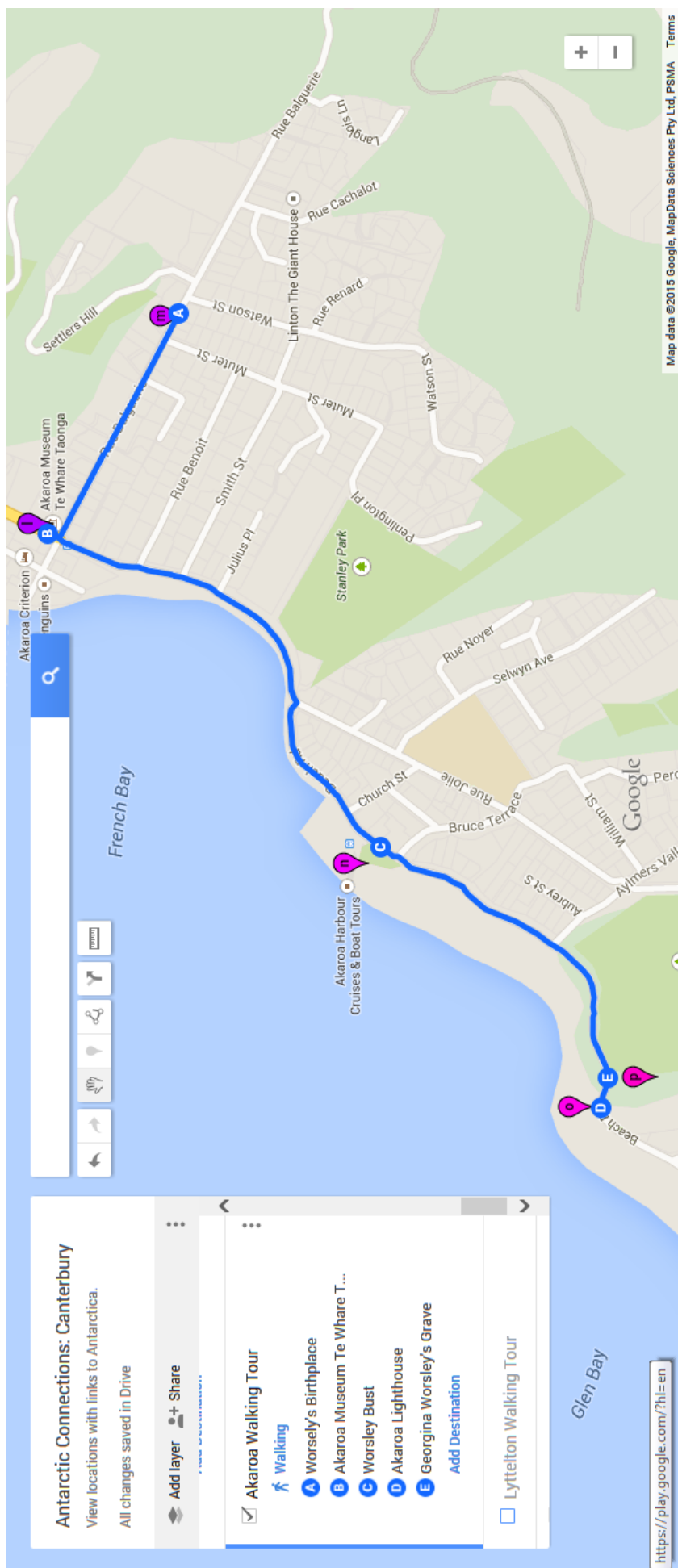
Frank's mother Georgina died after a miscarriage in April 1874 when he was 2. She is buried in the Anglican section of Akaroa cemetery where her gravestone can be found. Note the error in the spelling of her name by the stonemason.

### Try-pots

The Worsley family left Akaroa in the late 1870s and moved to Peraki on the South side of Banks Peninsula, then to Christchurch in 1883.

Whaling try-pots can be seen at Peraki Bay and some on *Beach Road* in Akaroa.





**[Akaroa Walking Tour Map](#)**  
**Distance = 3.8km (Return)**

# Visiting Antarctic Wildlife

Migrating wildlife that also calls Antarctica home can often be seen off Lyttelton Heads, sometimes in the harbour and rarely on land.

Visitors include:

Whales (Blue, Orca, Humpback, Southern Right and Pilot whales)



Seals (Leopard seal and NZ Fur seal)



Fish (Black Cod – an Antarctic over stayer from the ice age)

And a wealth of birds including penguins, albatrosses, petrels, skuas, cape pigeons, terns and mollymawks.



A White-flipped penguin colony is being established at [Boulder Bay](#) on Godley Head ([Location X](#)), and [Quail Island](#) ([Location j](#)). Blue / Fairy penguins can be seen in Akaroa Harbour, and at the [International Antarctic Centre](#) ([Location J](#)).

# Attractions by Explorer

## Scott

[A Canterbury Museum](#)  
[B 1 Park Terrace](#)  
[D Christchurch Cathedral](#)  
[E Scott Statue](#)  
[F Canterbury Club](#)  
[H Magnetic Observatory](#)  
[P Middleton Grange](#)  
[R Rangī Ruru Girls' School](#)  
[V Kinsey Terrace](#)  
[c St Saviours Anglican Church](#)  
[d Mitre Tavern](#)  
[e British Hotel](#)  
[g Graving Dock](#)  
[j Quail Island](#)

## Wilson

[A Canterbury Museum](#)  
[B 1 Park Terrace](#)  
[D Christchurch Cathedral](#)  
[F Canterbury Club](#)  
[P Middleton Grange](#)  
[W Uncle Bill's Cabin](#)  
[Z Kaiapoi Pa](#)  
[c St Saviour's Anglican Church](#)  
[d Mitre tavern](#)  
[e British Hotel](#)

## Shackleton

[A Canterbury Museum](#)  
[D Christchurch Cathedral](#)  
[F Canterbury Club](#)  
[H Magnetic Observatory](#)  
[P Middleton Grange](#)  
[S Shackleton's Oak Tree](#)  
[b Steam Tug Lyttelton](#)  
[c St Saviour's Anglican Church](#)  
[f Devonian Cottage](#)  
[h Torpedo Boat Museum](#)

[Scott's Discovery Trail](#) – incorporate City Centre and Lyttelton Walking Tours with driving route to other sites in between.

## Amundsen

[A Canterbury Museum](#)

[Uncle Bill's Trail](#) – incorporate City Centre and Lyttelton Walking Tours with driving route to other sites in between.

[Nimrod Trail](#) – incorporate City Centre and Lyttelton Walking Tours with driving route to other sites in between.

## Worsley

[Akaroa Walking Tour](#)

# Business Links

## New Zealand Ice Fest

In 2012 the city launched the biennial 'New Zealand Ice Fest - Bringing Antarctica to the World' to coincide with the annual celebrations for the Antarctic Season Opening.



## **Antarctic Season Opening**

Every year the city celebrates its Antarctic Gateway status and recognises the importance of the city's Antarctic partnerships and connections – diplomatic, scientific, historical and cultural. The Antarctic Season Opening celebration is usually coincident with the first flights to Antarctica at the end of September/beginning of October<sup>(47)</sup>.

## **Business Links**

*“Countries situated nearest Antarctica have strong interests in maintaining existing links and developing new connections with the southern continent. Commercial activities in the Antarctic, such as tourism and commercial fishing seem to be the most lucrative Antarctic-related businesses. But not all gateway cities can benefit directly from these ventures. Geographic proximity, local policies and infrastructure play key roles in the development of commercial activities.*

*However, the Antarctic business encompasses more than the infrastructure and supplies to support tourism. It includes logistics and operations for Antarctic National Programmes, search and rescue capabilities, development of local infrastructure, provisioning of appropriate goods and services to supply the Antarctic demand, experienced personnel, world-class scientists and universities and research institutes. Since the 1980s, governments have invested time and money in developing policies and improving the infrastructure and services in the Antarctic gateway cities. The emphasis on branding a city as the Antarctic gateway city not only attracts Antarctic-related business but it distinguishes them from other places in the world”. Gabriela Roldan*

In 2013, the aggregated, direct economic impact of Antarctic-related activities was \$102.9 million per annum for the Canterbury economy and \$161.7m for the New Zealand economy. It is also estimated that 2307 jobs in Canterbury directly or indirectly depend on Antarctic-related activities (Prof. Caroline Saunders).

(47. Reproduced from Christchurch City Council Antarctic Relations  
(<http://www.ccc.govt.nz/thecouncil/sistercities/antarcticrelations.aspx>))



# Business Links

## NZARI – New Zealand Antarctic Research Institute

The New Zealand Antarctic Research Institute (NZARI) partners with research agencies to develop a global understanding of Antarctica's impacts and vulnerability in a changing climate. NZARI's vision is to inform industry, government and community alike so that we can plan for impacts of change and, where possible, mitigate them. The focus is the Ross Sea Sector, where the Southern Ocean reaches its furthest south (85°S) beneath the Ross Ice Shelf<sup>(48)</sup>.



## GNS Science

GNS Science is the New Zealand research organisation that focuses on geological resources, environmental isotopes, industrial ion-beam technologies and natural hazards. They apply their research through consultancy and product development to create wealth, to protect the environment and to improve the safety of people. Our work in Antarctica discovers and measures the indicators of past climates that are recorded in the ice, so that the global science community can develop and test predictive models of climate change<sup>(49)</sup>.



## NIWA – National Institute of Water and Atmosphere

NIWA scientists carry out research in Antarctica from the bottom of the ocean to the top of the atmosphere. Antarctica's climate and atmosphere affect New Zealand and the rest of the world – changes there signal changes for the whole planet. NIWA has a long history of monitoring Antarctica's climate, with records dating back to 1957. Their deepwater research vessel *Tangaroa* has completed ten voyages to this unique environment, discovering its habitats and gaining insights to its way of life. Their research in Antarctica includes climate, atmosphere, fisheries, biodiversity and oceanography<sup>(50)</sup>.



## Contact

For further information, corrections or omissions please contact the author [James Stone](#), or supervisor [Ursula Rack](#), [Gateway Antarctica](#).

# Useful Links

For more information on the historical connections of New Zealand to Antarctica, the reader is referred to the book '*New Zealand and the Antarctic*' by L.B. Quatermain, 1971.

## **Amundsen**

Celebrating 100 years: Roald Amundsen's South Pole Expedition 1911

<https://www.youtube.com/watch?v=kW5p7ANwAU4>

The South Pole Antarctic expedition in the *Fram*, 1910-12 (Full Audio Book)

<https://www.youtube.com/watch?v=mYMyHnL1Voo&list=PLEm1neuAXOnQbkbw6I4B4AEaM0EPaEn0>

Antarctic Adventure Film Series

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-1>

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-2>

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-3>

<http://www.nzhistory.net.nz/media/video/antarctic-adventure-pt-4>

## **Antarctic Connections Map**

<https://www.google.com/maps/d/viewer?mid=zu8VzEvNNPP8.kf3iukXvTH3Y>

## **Antarctic Heritage Trust**

<https://www.youtube.com/user/AntarcticHeritage>

Restoring historic huts in Antarctica

<http://www.nzhistory.net.nz/media/interactive/scott-hutt-restoration>

Scott's Hut - Google Street View

<https://www.google.com/maps/views/view/streetview/antarctica/scotts-hut-cape-evans-on-ross-island/AfGF5tFC13NdN-gI2yHC8Q?gl=us&heading=30&pitch=86&fovy=75>

Shackleton's Hut - Google Street View

[https://www.google.com/maps/place/Shackleton's+Hut/@-77.5529523,166.1681919,3a,75y,82.46h,90t/data=!3m5!1e1!3m3!1s!OpxazFg6mE9O-qaLRC\\_uQ!2e0!3e2!4m2!3m1!1s0x0:0xfbb31828d1c01133!6m1!1e1?hl=en-US](https://www.google.com/maps/place/Shackleton's+Hut/@-77.5529523,166.1681919,3a,75y,82.46h,90t/data=!3m5!1e1!3m3!1s!OpxazFg6mE9O-qaLRC_uQ!2e0!3e2!4m2!3m1!1s0x0:0xfbb31828d1c01133!6m1!1e1?hl=en-US)

## **Antarctic links with New Zealand**

<http://www.nzhistory.net.nz/politics/antarctica-and-nz>

## **Baden Norris**

<http://www.radionz.co.nz/audio/player/1841424>

<http://www.stuff.co.nz/the-press/news/8748526/Award-means-an-awful-lot-to-me>

## **Christchurch Airport**

<http://www.christchurchairport.co.nz/en/about-us/corporate-information/gateway-to-the-antarctic/>

## **Heritage Expeditions Voyages**

<http://www.heritage-expeditions.com/cruises-expeditions-in-antarctica-voyages/>

## **Hillary & the TAE**

Arrival at the Pole by tractor

<http://www.nzhistory.net.nz/media/photo/dash-pole-tractors>

Edmund Hillary in Antarctica

<http://www.nzhistory.net.nz/media/photo/edmund-hillary-antarctica>

Hillary leads NZ party to South Pole - 4 January 1958

<http://www.nzhistory.net.nz/page/hillary-reaches-south-pole>

# Useful Links

On this Day - 1958: Explorer Hillary arrives at South Pole

[http://news.bbc.co.uk/onthistday/hi/dates/stories/january/4/newsid\\_4051000/4051107.stm](http://news.bbc.co.uk/onthistday/hi/dates/stories/january/4/newsid_4051000/4051107.stm)

Scott Base 50 Years TAE/IGY

[http://www.scottbase50years.co.nz/history/tae\\_iggy/expedition/info.htm#](http://www.scottbase50years.co.nz/history/tae_iggy/expedition/info.htm#)

**International Antarctic Centre**

[https://www.youtube.com/watch?v=xBk\\_NV6wxmU](https://www.youtube.com/watch?v=xBk_NV6wxmU)

<https://www.youtube.com/watch?v=EDPUcZIRbeA>

<https://www.youtube.com/watch?v=Y3rbuYLGsVM>

**Joseph Kinsey**

<http://www.nzhistory.net.nz/media/photo/joseph-kinsey>

**Levick's Notebook**

<https://www.nzahit.org/AHT/Levicks-notebook/>

[https://www.youtube.com/watch?v=pchT\\_WBw8Pw](https://www.youtube.com/watch?v=pchT_WBw8Pw)

**Lyttelton Timeball Station**

[www.timeball.co.nz](http://www.timeball.co.nz)

**Magnetic Observatory**

<http://www.teara.govt.nz/en/photograph/9221/magnetic-observatory-buildings-christchurch>

**Map of other places in NZ linked to Antarctica**

<http://www.nzhistory.net.nz/media/interactive/nz-antarctic-places-map>

**Mawson**

Eric Webb - Magnetician

<http://www.radionz.co.nz/audio/player/2574841>

**McMurdo Station**

<http://www.nsf.gov/geo/plr/support/mcmurdo.jsp>

**Mt Erebus**

Erebus Disaster: First Film

<https://www.youtube.com/watch?v=htZg8DleGZI>

Plane wreckage on Mt Erebus (photo)

<http://www.nzhistory.net.nz/media/photo/plane-wreckage-on-erebus>

Plaque to New Zealanders killed while working in Antarctica

<http://www.nzhistory.net.nz/media/photo/antarctica-helicopter-crash>

**Operation Deep Freeze**

First flights to Antarctica

<http://www.nzhistory.net.nz/media/interactive/antarctica-aeroplane>

Broadcast of first flight to Antarctica

<http://www.nzhistory.net.nz/media/sound/broadcast-first-flight-antarctica>

**Ponting**

Ninety Degrees South

Full version <https://www.youtube.com/watch?v=PKBttUMKND4>

Preview <https://www.youtube.com/watch?v=8eENO8XzF3g>

Penguin drive <https://www.youtube.com/watch?v=FQlkb4LJFL4>

**Primus Stove**

[http://en.wikipedia.org/wiki/Primus\\_stove](http://en.wikipedia.org/wiki/Primus_stove)

**Quail Island**

<http://www.nzhistory.net.nz/media/interactive/quail-island-dog-kennels>

# Useful Links

Quail Island Brochure

<http://www.doc.govt.nz/Documents/parks-and-recreation/places-to-visit/canterbury/mahaanui/quail-island-brochure.pdf>

Quail Island Adventures with Black Cat Cruises

<http://blackcat.co.nz/quail-island-adventures>

Quail Island White-Flipped Penguin Project

<http://www.quailisland.org.nz/index.php/penguin-project>

## **Ross Sea photos**

<https://www.nzah.org/AHT/ross-sea-party-lost-photos/>

Century-Old Frozen Photos Found In Antarctic Expedition Hut

<https://www.youtube.com/watch?v=hrVj2GfEPeM>

## **Scott**

SPRI Index to Antarctic Expeditions

<http://www.spri.cam.ac.uk/resources/expeditions/>

Death of Robert Falcon Scott

<http://www.nzhistory.net.nz/media/photo/robert-falcon-scotts-death>

Other memorials to Scott in New Zealand

<http://www.nzhistory.net.nz/media/interactive/scott-memorial-oak-tree>

Identifying artefacts associated with Captain Robert Falcon Scott's British Antarctic Expedition 1910-1913 held in Canterbury, New Zealand considered suitable for exhibition.

[http://www.anta.canterbury.ac.nz/documents/GCAS%20electronic%20projects/GCAS%2010%20projects/Fiona\\_Wills.pdf](http://www.anta.canterbury.ac.nz/documents/GCAS%20electronic%20projects/GCAS%2010%20projects/Fiona_Wills.pdf)

NZAHT - Meet the Crew of Captain Robert Falcon Scott's Terra Nova Expedition

<https://www.nzah.org/AHT/MeettheCrewEvans/>

NZAHT - History of Cape Evans Terra Nova hut

<https://www.nzah.org/AHT/HistoryEvans/>

SPRI Captain Scott's 'lost' photographic negatives saved for the nation

<http://www.spri.cam.ac.uk/museum/appeals/scottnegatives/>

Saving Scott's Negatives

<https://www.youtube.com/watch?v=KG69kAPIVvU>

Scott of the Antarctic Movie

<https://www.youtube.com/watch?v=jLgs483F1zs>

## **Scott Base**

The Mess (A Hut), Scott Base

<http://www.nzhistory.net.nz/media/photo/caring-huts-antarctica>

Antarctica New Zealand – About Scott Base

<http://www.antarcticanz.govt.nz/scott-base>

History of Scott Base

<http://www.scottbase50years.co.nz/history/scott/info.htm>

Scott Base opened in Antarctica - 20 January 1957

<http://www.nzhistory.net.nz/page/scott-base-opened-antarctica>

<http://www.nzhistory.net.nz/media/photo/opening-scott-base-1957>

Scott Base 50 Years

<http://www.scottbase50years.co.nz/>

Google Street View from Observation Hill

<https://www.google.com/maps/views/view/109279384207539241633/gphoto/5999370395868384450?hl=en&gl=nz&heading=225&pitch=90&fov=75>



# Useful Links

## **Shackleton**

SPRI - Virtual Shackleton

<http://www.spri.cam.ac.uk/library/archives/shackleton/>

Shackleton's Connections with Canterbury, 1901-1917

<http://www.anta.canterbury.ac.nz/documents/GCAS%20electronic%20projects/Jan%20Ellis%20Project.pdf>

Captain England Paper Article

<http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&d=OW19071127.2.129>

Departure of Shackleton's British Antarctic Expedition, Departure from Lyttelton, New Zealand, 1908

<https://www.youtube.com/watch?v=SZCDs2rT6Lo>

Survival! The Shackleton Story

[https://www.youtube.com/watch?v=sgh\\_77TtX5I](https://www.youtube.com/watch?v=sgh_77TtX5I)

Endurance Expedition Parties

<http://www.nzhistory.net.nz/media/interactive/shackleton-sea-parties>

Ed Hillary, Vivian Fuchs and George Lowe discuss Shackleton

<http://www.nzhistory.net.nz/media/sound/ed-hillary-and-vivian-fuchs-discuss-shackleton>

Ross Sea Party

[http://en.wikipedia.org/wiki/Ross\\_Sea\\_party](http://en.wikipedia.org/wiki/Ross_Sea_party)

Shackleton's Motor Car

[http://www.nzaht.org/content/library/The\\_First\\_Motor\\_Car\\_on\\_the\\_Continent.pdf](http://www.nzaht.org/content/library/The_First_Motor_Car_on_the_Continent.pdf)

## **Shackleton's Whisky**

Mackinlay's Shackleton The Journey

<https://www.youtube.com/watch?v=H5KeV7Fvenc>

<https://www.nzaht.org/AHT/TheGreatWhiskyCrateThaw/>

<http://whiskythaw.canterburymuseum.com/>

## **USAP Photo Library**

<http://photolibrary.usap.gov/>

# Scott Antarctic

Ernest display members work returned Aurora heroic South Ross Pole Trans-Antarctic Sir public 100 expeditions Location early Cape November Trust support ponies Station part time Expedition hut Erebus base British used rescue home Discovery International one Party Base RETURN Royal ship March arrived Akaroa Museum including Island

Lyttelton first Robert Amundsen Navy Operation United party died Wilson island Nova Falcon Sea Mr February Hut, Shackleton's port return Program aircraft Heritage aircraft Research Akaroa Museum RETURN

Scott's also Stone conservation Air St scientific Nimrod States NZ dogs research left Worsley Kinsey Centre February Hut, Shackleton's port return Program aircraft Heritage aircraft Research Akaroa Museum RETURN

Christchurch Shackleton James McMurdo second Terra December

people services Morning journey dog Quail

also Scott's Antarctic Sea

men Captain Magnetic Ponting Amundsen Navy Operation United party died Wilson island Nova Falcon Sea Mr February Hut, Shackleton's port return Program aircraft Heritage aircraft Research Akaroa Museum RETURN

Connections activities Evans Edward years Scott's